Volume XX, No. 1
September/October 1976

ILLINOIS TEACHER
OF HOME ECONOMICS

FUTURISM AND HOME ECONOMICS

PERSPECTIVES ON OUR HABITAT

HOME ECONOMICS EDUCATION · UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

A publication of the Division of Home Economics Education,
Department of Vocational and Technical Education,
College of Education, University of Illinois,
Urbana, Illinois 61801

Vol. XX, No. 1, September/October 1976. Published five times each academic year. Subscriptions $7.50 per year, $21 for three years; Canada, $8.50 per year, $24 for three years; Foreign, $10 per year, $27 for three years. Single copies $1.75. Special $5 per year for undergraduate and graduate students when ordered by teacher educator on forms available from ILLINOIS TEACHER office.

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Foreword

For the twentieth volume of *Illinois Teacher*, Futurism and Home Economics has been chosen as the theme. In recent years, greater attention has been given to a "future orientation"; indeed many writers and philosophers believe that our very survival depends on our adoption of futuristic perspectives. Anticipating and creating planned change rather than responding passively to societal change is the challenge given to us by futurologists. This is the challenge we would like to take up in this twentieth volume of *Illinois Teacher*, by addressing from a futuristic perspective, several areas of interest to home economists.

This first issue has as its theme, Perspectives On Our Habitat. In this year of the United Nations Conference on Human Settlements, known as Habitat, this topic has been given increased attention. Traditionally, we may have approached the topic of housing from the view of the house and its interior. The term habitat was chosen deliberately because it describes a broader and more holistic approach to housing which encompasses not only the house, but also the community; the transportation and communication systems; the energy and resource requirements; environmental characteristics such as pollution, crime, and green open spaces; the degree of social alienation or participation possible. In preparation for initiating planned change, all of these factors deserve attention.

A further challenge is evident also, I believe. This challenge is to work cooperatively with other specialists who understand this complex "habitat." In this issue we have tried to call on a few of these diverse experts including educators, home economists, architect-planners, designers, research scientists. We hope that readers will try to contact local "experts" in their own communities to add to the information included in this issue.

One of the most fascinating features of the U.N. Conference on Human Settlements was the inclusion of sessions for children who were asked to think ahead to the type of communities and homes they would live in in the future. Because of their openness and lack of inhibition, the children developed highly imaginative and innovative approaches which challenged some of the ideas of adult delegates. Our students are likely to be as able to develop these kinds of approaches if given the opportunity to do so in our classrooms.

Good luck in your endeavors to "THINK FUTURE."

Donna M. Woolcott
Editor for this Issue

CALLING

ALL HOME ECONOMICS TEACHERS

WITH CO-ED CLASSES

We'd like to hear from you! We want to hear about your positive experiences in teaching home economics to both sexes, preferably *together*. What have you found most effective in terms of content, teaching techniques, classroom management, personal relationships, evaluation procedures? What are your principal objectives?

Share your success experiences in a paragraph, a page, or a longer article. Or let your students speak for themselves. We'd love some photographs, too!

We'll include some of these in a coming issue of ILLINOIS TEACHER and **we need to hear from you by November 1 if possible.**

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FUTURISM AS FOCUS FOR HOME ECONOMICS EDUCATION

The call for government supported day care was answered in 1995 as the participation of mothers in the labor force increased to 82 percent.

With ever increasing options for obtaining basic nutrients, the demands for tillable farm land are decreasing. At the same time, the demand for housing for workers in the plants manufacturing synthetic foodstuffs is increasing, gobbling up the green belts planned around cities in the early 1980's.

In 1980, couples were first able to accurately determine the sex of their developing fetus. There are now, in 2005, five males for every three females. The advertising and media industries, therefore, are stepping up efforts to help men make themselves more alluring to the opposite sex.

As more and more families live in condominiums and town houses the demand for garden plots on the edges of cities and suburbs has increased. Realtors specializing in this area report six meter by ten meter plots selling for $15,000 with the price expected to be $18,000 by 2013.

We as home economics educators have, as one of our goals, the preparation of individuals for the future. Whether we teach consumer education to teen-agers or parenting skills to adults, our focus needs to be on helping to develop knowledge, skills, and attitudes for tomorrow, next month, and the year 2000.

In setting the theme for this Twentieth Volume of the *Illinois Teacher,* it seems appropriate to begin by defining this developing topic, discussing philosophies and approaches relating futurism to home economics education, and exploring ways in which we can incorporate future planning into home economics curricula. By choosing this topic as the theme for this volume, we hope to provide an opportunity for home economics educators to explore the issues, describe possible futures, discuss the implications, and try out ideas in home economics educational settings.

Why should we teach with the future in mind? What is this thing called futurism? How should we view the future? How can we teach in ways that will help our students improve their quality of life and cope with various types of change? Let us look for some answers.

WHY FOCUS ON THE FUTURE

The recent statement for our profession, "Home Economics—New Directions II"[1] describes as one of five new priorities for home economics:

> 1. FUTURISTIC THINKING AND PLANNING. Envisions alternative designs of everyday living and critically evaluates and interprets the costs/benefits of these. For example:
> - reshaping values
> - assuring optimum human development and viable environments
> - recognizing the relationship of private and public decisions (p. 27).

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[1]Gordon Bivens, Margaret Fitch, Gwendolyn Newkirk, Beatrice Paolucci, Em Riggs, Satening St. Marie, and Gladys Vaughn, "Home Economics—New Directions II, *Journal of Home Economics,* 67:3 (May 1975), 27-28.

Another of the five priorities is:

> 2. CREATIVE ADAPTATION TO UNCERTAINTY AND CHANGE. Views the opportunities inherent in change and is willing to assume risks in directing change affecting families. For example:
> - taking a stand on controversial issues in one's professional role
> - accepting conflict as an effective mode for clarifying values
> - pioneering new professional dimensions in response to change (p. 28).

If we accept this mission of our profession, we must be oriented toward the future. We need to give thought to ways we can develop this orientation and the directions this orientation might take.

In addition to the fact that our home economics professional organization has already identified a future focus as worthy of attention, so also has the education profession. The words "futurism" and "futurology" are appearing more and more frequently in the literature of education. In the *Education Index*, that bible for those doing literature searches in education, one now finds listings under the headings of "Future," "Forecasts," "Twenty-First Century," and, since 1974, "Future Studies." Most articles found under these headings are, in one way or another , telling us what the future will be like or admonishing educators to be more future oriented in their practices.

"Everyone is Doin' It," but so what? Does that really give us a sound rationale for teaching with the future in mind? Alvin Toffler[2] has said that:

> All education springs from some image of the future. If the image of the future held by a society is grossly inaccurate, its education system will betray its youth (p. 3).

And we cannot hope to come close to accuracy in our future imagery unless we think about it, study about it, and work at teaching about it.

The future begins now. What we hope for and expect now will influence what we realize in the year 2000. Do we want government supported day care, synthetic foods, human genetic engineering, and $18,000 garden plots? We must work toward the things we want; we must work against the things we don't want. We must study our future if we are to direct and control it.

The self-fulfilling prophecy that we talk about when we discuss motivation for learning may also be an important idea to keep in mind as we provide ourselves with a rationale for studying the future. It is sometimes hypothesized that we get what we want; that we do, in fact, control our destinies. Therefore, if our future is to be what we want, we see even more reason for the need to think about it, study it, and plan for it.

FUTURISM IN HOME ECONOMICS EDUCATION DEFINED

As we read and think about the future and our role as home economics educators in helping others prepare for the future, it may help us to look at some definitions and descriptions of futurism found in the educational literature. From this, perhaps, we can develop a definition for futurism in home economics and home economics education.

Burdin[3] defines and describes futurism in three different ways:

> Futurism is a process for studying and reacting to projected changes.
>
> . . . an intellectual and imaginative projection of emerging phenomena and conditions. . . .
>
> Futurism is a tool to be used by . . . school personnel in planning learning experiences (p. 141).

Therefore, we see futurism emerging as a concept which requires a bit of time and attention if we are to react to it and use it. We need to take time to study and think if we are to be successful in using the futurism idea in making curriculum more relevant.

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[2]Alvin Toffler, "The Psychology of the Future," *In Learning for Tomorrow: The Role of the Future in Education* (New York: Random House, 1974), pp. 3-19.

[3]Joel L. Burdin, "Futurism as a Focus in Instructional Planning," *Journal of Teacher Education,* 25:2 (Summer 1974), 141-147.

Olmo[4] uses similar words to define what she calls "futuristics": "By futuristics, we mean a study of future possibilities or the methods of scientifically studying the future" (p. 246). The part of this definition which can most interest us is the reference to methodology. Simulation, role playing, Delphi technique, value clarification, the arts, science fiction, and problem solving techniques are examples of the wide variety of methods suggested for studying the future.

To further extend our concept of futurism we need to know what kinds of outcomes we can be happy with when using a study of the future as one guide to decision making in the teaching-learning process. Toffler[5] provides one statement for our reaction.

> The ultimate purpose of futurism in education is not to create elegantly complex, well ordered, accurate images of the future, but to help learners cope with real life crises, opportunities, and perils. It is to strengthen the individual's practical ability to anticipate and adapt to change, whether through invention, informed acquiescence, or through intelligent resistance (p. 13).

When we see that we are not expected to be geniuses or genies and are not expected to take on one more job in the ever increasing multiplicity of roles we assume as home economics educators, the idea of orienting our teaching toward the future doesn't sound so threatening. Haven't we always said we are helping students cope with and adapt to change? This is why futurism seems to me to be a very important and logical concept for us in home economics education to focus upon. Perhaps our thinking simply needs to be more often upon the future than upon the past and present. Educators, especially those in higher education, are frequently accused of this fault in the literature of educational futurism.[6]

Then, how might we define the phrase "futurism in home economics education"?

—if we use the definition of home economics from "Home Economics—New Directions II":[7]

> Home Economics in its most comprehensive sense is the study of laws, conditions, principles, and ideals which are concerned on the one hand with man's immediate physical environment and on the other hand, with his nature as a social being, and is the study *especially* of the relation between these two factors (p. 26).

—if we further remember that

> The focus of home economics is family life in its various forms (p. 26).

and that

> home economics works through the family (p. 26).

—if we add to that the description of home economics education as that part of home economics which is responsible for transmitting the knowledge, attitudes, and skills which are the focus and purpose of home economics to others in an educational environment;

—if we finally refer back to the definition of futurism; what might we say? Consider this as a possible definition:

> **Futurism in home economics education** ***is a study of possible future changes, and the methods of studying these changes for the purpose of helping students in home economics cope with their futures, improve their quality of life, and anticipate and adapt to change in a positive way as they function in families in their various forms and as they are influenced by their physical and social environments and the relationships between these environments.***

This definition closely allies the focus of futurism to the focus of home economics and home economics education. We, as professional home economics educators, need to ask whether this idea is compatible with our philosophy of home economics. We also need to decide whether this is a focus which will strengthen our home economics educational programs. I believe it is.

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[4]Barbara G. Olmo, "Futurism in the Curriculum," *Clearinghouse,* 49:6 (February 1976), 246-248.

[5]Op. cit.

[6]John A. Dow, "Alternative Futures for Education: Trends and Implications," *Journal of Teacher Education,* 25:2 (Summer 1974), 13-15; Harold G. Shane, "The Future as a Force in Educational Change," *Phi Delta Kappan,* 57:1 (September 1975), 13-15.

[7]Bivens, op. cit.

FUTURISM IN HISTORICAL PERSPECTIVE

To more clearly understand the concept of futurism, it would be helpful to review the historical roots of futurism (or futuristics). From this review we will realize that, although the terminology and the amount of attention is perhaps new, the idea is not.

From the very beginnings of recorded civilization one can discern in religious and secular writings a human awareness of the idea of the future.[8] The *Bible* and the *Koran* are religious examples. The idea of a better world in the future is discussed in Plato's *Republic*. In Cicero's *De Republica* one reads that "the direction in which education starts a man will determine his future life" (Book IV).

Writers in the early modern era discussed proposals and possibilities for a better future for society and for education. Thomas More's *Utopia* in 1516, Francis Bacon's *New Atlantis* in 1627, and Jean Jacques Rousseau's *Emile* in 1792 are examples.

Several authors of the nineteenth century wrote of the future. We recall the forecasts of Jules Verne in his novels. Probably the most important writings for helping us think about our own futures are those of the present century. We immediately think of Aldous Huxley's *Brave New World* (1932), H. G. Wells' *The Shape of Things to Come* (1933), and George Orwell's *1984* (1949). In 1969 John McHale published *The Future of the Future*.

Futurism also has a history to be traced in educational literature. English and German writers in the late 1800's and early 1900's suggested the adoption of universal education and "relevant" curriculum. And in 1915, John and Evelyn Dewey published *Schools of Tomorrow* in the United States. We are all aware of the impact of the concepts expressed in the literature upon education and especially upon home economics education today.

In times of war and of social and economic unrest we usually find much attention given to thinking about better times ahead. The approach of a new century also fosters thought and planning about the future. We can see that these events have certainly influenced educational writings in the 1970's. Alvin Toffler, who perhaps contributed greatly to the contemporary concept of futurism by writing *Future Shock* (New York: Random House, 1970) has recently served as editor of another book for general audiences titled *Learning for Tomorrow: The Role of the Future in Education* (New York: Random House, 1974). Home economics educators will find food for thought in the articles in this collection. Another book of readings, *The Future of Education: Perspectives on Tomorrow's Schooling*, edited by Louis Rubin of the University of Illinois (Boston: Allyn and Bacon, 1975) analyzes the impact of today's social, political, and educational trends on the public classrooms of the future. This is recommended reading as a more scholarly follow up to the book edited by Toffler.

This brief historical perspective serves to describe the long developing topic of futurism in general and in educational writings. The topic is not new; the terminology—futurism, futurology, futuristics—is.

FUTURISM AS FOCUS FOR HOME ECONOMICS CURRICULUM PLANNING

We have discussed possible reasons for a focus upon the future as one source of ideas for curriculum. We have proposed a definition or description of futurism in home economics education. We have discovered that man's concern about the future is certainly not a contemporary phenomenon. And we have discussed possible ways of viewing the future.

But we are home economists. We are interested in what we can **do** in our various educational settings—as junior and senior high teachers, utility company representatives, extension advisors, consumer advocates, curriculum specialists, consultants, etc., etc.—to better prepare people for the future through home economics.

I am going to describe two possibilities for home economics teaching which hopefully will spark imagination and creativity. In future issues of this volume of *Illinois Teacher* you will find more ideas. But, best of all, you are going to write and tell us of your ideas and experiences so that we can share them with all our readers.

IDEA I: HOUSING

"Big Idea." The type of housing which people will have available to them in the future will be different from current patterns if developing trends are to continue.

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[8]William W. Brickman, "Futurology in Education," *Intellect*, 104:2369 (November 1975), 188-190.

Objectives. As a class project students could:

- Identify changes occurring in the past 10 to 15 years
- Discover new materials and approaches just now being introduced
- Determine what new materials and approaches are projected by "experts" for the years ahead.
- Discuss possible implications for family life and happiness

Activities. These objectives could be met through the following learning activities:

- Interviews in the community
- Trips to construction sites and factories
- Study of magazines and trade journals in the housing industry
- Development of a photo exhibit
- Guest speakers
- Interviews with owners and/or builders of homes with solar energy plants
- Visits to families living in apartments and in large, single family homes
- Discussions with lending institutions about home financing in the future
- An invited panel consisting of home economists, builders, realtors, family counselors, and social workers who can discuss the effects of housing upon families from their perspectives
- Writing of possible news articles about the future of housing
- Identification of innovations being tested in other countries

Evaluation. As a summary to such activities students may be asked to verbally or in writing describe what pattern of housing is realistic for them to expect in 10 to 20 years and what they as citizens will need to do if they are to achieve their goals. These descriptions can be used as a basis for student and teacher evaluation.

- Were students successful in finding information?
- Were projections for the future easy to find?
- Were students confident in trying to make their own predictions?
- How "creative" were students in analyzing relationships between future housing and the effects upon families and individuals?
- Are students still bound by the past and present in their predictions or do they use the past and present as a springboard to think of future possibilities?
- Do you feel you have been successful in helping students to think and plan ahead and to view the future with excitement and anticipation?

Let's compare this approach to what we may be presently doing in various educational settings. We often have overall goals in housing units related to such concepts as construction, materials selection, community surroundings, and various aesthetic and environmental factors. It seems to me that we can still reach these content goals with the activities described above. What we have really changed is the perspective or the time line. We have probably been much more successful in preparing our students for their futures. And the only thing we may have left out is the part dealing with helping students to correctly distinguish between "Dutch Colonial" and "Georgian Colonial"!

IDEA II: CHILD DEVELOPMENT

"Big Idea." The alternatives available for child rearing in the future will be different from current alternatives if trends in such areas as family life, career development of men and women, and sex determination are to continue.

Objectives. Let's suppose you decide to have students spend some time identifying, investigating, and analyzing alternatives for child rearing.

Activity. The learning experience for helping students achieve this objective might involve the use of a planning technique I will call a Decision Making Grid.[9] This technique may easily be adapted to decision making situations in all areas of home economics. Family relations, nutrition, and consumer buying are examples.

Activity. The technique involves developing a list of possible alternatives, then deciding which are desirable, and finally determining which are feasible or can actually be put into operation. We will discuss the procedure for this activity in a step-by-step approach.

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[9]Adapted from a technique described in: Constantine Doxiadis, "The Desirability-Feasibility Grid for the Consideration of Alternatives," Athens Center of Ekistics, The World Society of Ekistics Conference on Education, Document B, No. 13, July 1971, p. 8. Also described in: Prudence Dyer and Marjorie Prentice, "Planning Educational Futures," *Educational Forum*, 39:4 (May 1975), 479-483.

Materials needed: Each participant or small group of students that you may select to work together should ideally have one acetate transparency printed or drawn with the Decision Making Grid (Figure 1) and one "A/V" felt tip pen. For the summarizing session an overhead projector will be needed. (You may wish to photocopy the page on which Figure 1 appears and use this as a master for making permanent transparencies to be used over and over again.)

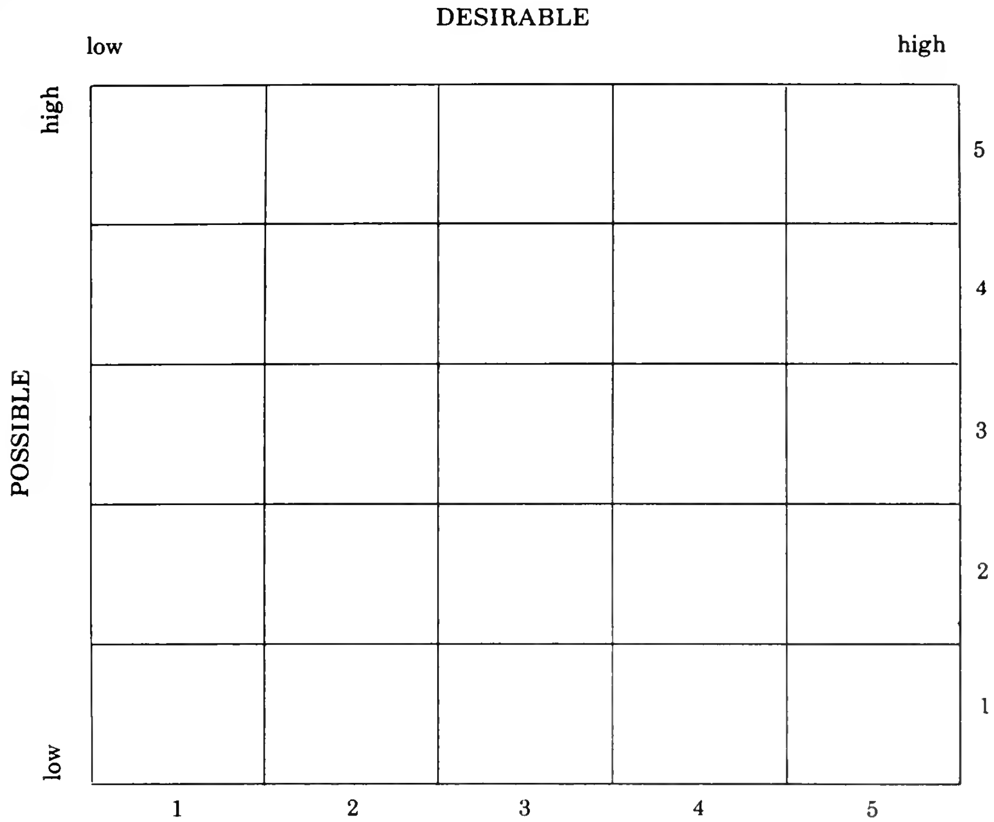

FIGURE 1. Decision Making Grid

Step 1. The first task is to have the students develop a list of alternatives (i.e., tasks, options, goals, desired objectives, etc.). In the example used here the list would consist of various alternatives which may be available for child rearing in the future. You may choose to say: . . . in 10 years, in 20 years, by 1999, etc.

Students may spend more than one class session on this task and also may have assignments outside the classroom. Brainstorming sessions, "expert" opinions, readings, TV programs, and role playing activities are suggested ways in which the list of alternatives can be constructed. The teacher could develop the list but student learning would probably be much less.

Step 2. Each item in the list needs to be assigned a number or letter but no priority order should be indicated.

Step 3. Each participant or group records the number or letter of each item on the list in the preferred square or cell on the Decision Making Grid transparency.

An example to illustrate the procedure for this is as follows: an alternative on the developed list may read "Children raised by a full-time mother in the home." This may happen to be number 5 on the list. One participant or group may decide this is "4" in relation to "desirability" and "2" in relation to "possibility." They will therefore place a number 5 in the corresponding square or cell on their transparency grid.

Step 4. The teacher collects all transparencies, stacks them, and displays all of them on the overhead projector for instant feedback to students. Discussion and analysis will follow.

If there is agreement this will be immediately apparent because the tallies made by each group for each of the alternatives will be in the same cell or a neighboring cell. For divergent responses, students can offer supporting arguments. Those items appearing in the upper right corner of the grid, the nine cells indicated by the 3 x 3 cell and above, will give a basis for decision making: it will provide a means of ordering priorities and possibly eliminating those alternatives from the list which students or groups did not record in the nine squares of the upper right squares of the grid.

Step 5. The final step is to *use* the information gathered via this phase of the decision making process to determine possible ways of implementing the alternatives chosen as top priorities and possibilities. We refer here to developing a plan of action by helping students see that they can plan and work toward achieving the kind of possible futures they find most desirable and feasible.

There are various ways of handling Step 5. You may choose to have students discuss in groups and verbalize their ideas, write them, or choose students to form a panel for discussion.

You will find many educational situations other than the secondary classroom where this technique can be adapted. It can be useful with adult groups, as a means of setting priorities for the home economics department, and even for your own private decision making.

But, as with the technique suggested in Idea I, the advantage of this technique is that it helps students be future-oriented and helps them see that, if they plan for it, they can better control their futures.

OUR FUTURE WITH FUTURISM

Futurism is a study of possible future changes. There are a variety of methods and techniques which we as home economics educators can select and initiate with our students and clients to help them identify and study these future changes. The process of focusing on the future helps us more successfully to fulfill our mission of helping people cope with the future, improve their quality of life, and positively anticipate and adapt to change. These people will then be happier and more fulfilled as they function in families in their various forms. They will be in better control of their physical and social environments and be better able to guide the interactions between these environments.

We as home economics educators have been prepared to help others improve their quality of life. We are professionals with expertise to help others in the decision making process, in guiding the future, and in working toward individual fulfillment. We are able to accept the challenge of focusing upon the future in our professional—and personal—lives.

SUGGESTIONS FOR FURTHER READING

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DIRECTORY OF RESOURCES FOR FUTURISTIC STUDIES

Center for Adaptive Learning, Inc., 34 West 13th Street, New York, NY 10011

Center for New Schools, 431 S. Dearborn, Suite 1527, Chicago, IL 60625

Educational Resources Information Center (ERIC) Centers in Washington, DC and other cities (Look under the following index descriptors in ERIC's **Current Index to Journals in Education:** FUTURES (OF SOCIETY), FUTURE, FUTURISM, FUTURISTICS, FUTUROLOGY)

Futuremics, Inc., 1346 Connecticut Avenue, Washington, DC 20036

World Future Society, P.O. Box 19285, 20th Street Station, Washington, DC 20036 (The WFS has a brochure, *Films on the Future: A Selective Listing*, prepared by Marie Martin in 1973. They also have a curriculum guide and a learning resources guide prepared by David Miller and Ronald Hunt.)

HABITAT

By Donna Woolcott fron information obtained fro U.S. Department of Stat

For two weeks in June, Habitat, a United Nations Conference on Human Settlements met in Vancouver, Canada, to seek solutions and develop policies which will lead to improved quality of the human environment. One hundred and twenty countries were represented at the conference. The purpose of Habitat was to build both a better understanding of the issues involved and a greater appreciation of the urgency and magnitude of the tasks which lie ahead in improving the human environment.

The conference attempted to stimulate new approaches toward the building of future settlements in order to:

- ☆ eliminate slums and squatter settlements;
- ☆ avoid environmental degradation through air and water pollution;
- ☆ economize on the use of energy and other resources;
- ☆ preserve agricultural land for agricultural production;
- ☆ avoid the prospect of 20 to 40 million people crowded into single metropolises in developing countries;
- ☆ give citizens greater opportunities to participate in the planning and decision making that affects how they live.

While individual nations cannot solve the human settlement problems of other nations, cooperation in sharing of expertise, resources, and solutions is sought to bring about a better quality of life for all nations of the world.

The United States participation in the conference was coordinated by the U.S. Department of State with the assistance of the Departments of Housing and Urban Development; Agriculture; Transportation; Health, Education, and Welfare; Commerce; and Interior; the Council on Environmental Quality; Environmental Protection Agency; Federal Energy Agency; and the Agency for International Development.

In addition, Habitat National Center has been established to provide additional information and contribute to public awareness and discussion of human settlement issues in the United States. The Center houses a library of publications on Habitat related subjects, a projection room for films, slides, and files on more than 1000 successful solutions to various community problems. Subject areas include community development, transportation, health, communications, citizen involvement, learning, human values and understanding, recreation and leisure, economic development, and citizenship. These files are open to the public.

The Center is located at 1111 18th Street, N.W., Washington, D.C. 20036. A toll free number is available for more information: (800) 424-2793. □

MAKING AN ENVIRONMENTAL CODE FOR HABITAT

Moshe Safdie
Architect
Montreal, Canada

The departure point for the design of cities and communities must be the quality of life of the individual, the family and the immediate community. In approaching the subject from the point of view of the individual and the family, we assess the quality of the habitat by such questions as: How much space do they have, indoors and outdoors? Do they enjoy privacy or not? Do they have the public spaces necessary for the social intercourse of adults and children? Do they have community facilities such as shops, health care services, daycare centers, elementary and advanced schools, community centers, and cultural and recreational facilities in close proximity? Beyond that is the question of the availability and distance to work. Does the individual travel a few minutes or many hours to his work? Does he do so in a pleasant or unpleasant environment? What in general is his mobility within and accessibility to the variety of amenities which we associate with the word "city"?

Whereas, on the one hand, we come to consider the design of cities and urban sectors, neighborhoods and communities, that make up the city, from the point of view of the individual, on the other we also come to realize that the decisions that most profoundly affect the quality of life of the individual habitat, are made at the highest levels, such as those policies that determine the national and regional patterns of human settlement, the relationship and location of industry and agriculture, and the availability of transportation networks at all levels. Put in other terms, the decisions that determine whether families will be housed at densities of one or one hundred to the acre, or whether they will live in a city of a hundred thousand people, one million people, or ten million people, are the decisions which most profoundly affect the quality of their life and the economic framework surrounding it. When we come to design the individual house or community, we have little influence or effect on the pattern of these decisions; we must accept them as given and do the best we can. We must therefore first give our attention to the policies and decisions that affect the number, size and shape of cities, their distribution in the regional and national network, and the very broad patterns of settlement which are the very basic framework of a national economy.

When we are concerned with developing countries, we must relate to our experience and observation of the natural tendencies of urbanization in other countries which enables us to reasonably predict the direction of evolution without intervention. What we have seen take place in the more industrialized Western countries, is urbanization bringing with it certain predictable patterns. We have seen the development of the so-called metropolitan city or megalopolis—cities of five, six, ten and fifteen million people—but more significantly, we have seen a series of cities that interlink to form whole urbanized regions, several hundred miles across, congested and over-built while millions of acres sit vacant in other parts of the country. We have seen the natural tendencies of industry, commerce and business to concentrate even though the millions of inhabitants drawn to these concentrations—seeking the choice of employment, educational and other facilities—create congestion which we have been physically unable to cope with and which has been socially destructive. We have seen the stratification and separation of industry and agriculture, and the resistance of most industries to lend themselves to dispersal. We have also seen, that where intervention has brought about such dispersal, there are powerful social forces resisting it, and that it is the desire of most individuals to flock to the metropolitan city with all it has to offer, notwithstanding the agonies of their everyday life. But, whereas it is reasonable to say that urbanization in the industrialized West was brought about by forces from within the economy and within the society, we can also say that urbanization in the developing East is really the result of external forces brought about by the importation of technologies as well as values from without. The introduction of anti-malaria serum in the south of India in the 1950's reduced the

Presented to the International Congress of Architects, Tel Aviv, Israel, 1975.

mortality rate manyfold, and brought about an explosion in the rate of population growth. It is clear that one cannot import the anti-malaria serum from outside the framework, or import industrialized agriculture, including tractors, the steel industry for the tractors, the oil industry to run the tractors and make fertilizers, and the entire infrastracture necessary to support a system that in the West has evolved with time and with forces from within society, without impunity. With primarily external forces, urbanization in the developing countries has therefore been much more destructive and disruptive to the life and economy of these socieites.

If non-intervention has generally resulted in calamities in the urbanization of the West, it is necessary to evaluate the methods of intervention which were attempted and their relative success. We tend to think of the United States as a classical example of non-intervention in the forces and patterns of urbanization. The 'laissez-faire' attitude concerning the ownership of land and the right to use it, and urban sprawl going on unrestrained and unrestricted, are all characteristics of American urbanization. However, it is important to remember that this seeming non-intervention is actually made possible through massive intervention in the system. The most dramatic form of intervention has been the construction of a highway and expressway system unparalleled in history. The inter-state highway system, the inter-city and in-city expressway system, and the overall investment in road construction in preference to every other form of transportation, made possible the enormous dispersal of the American city and the creation of megalopolis.

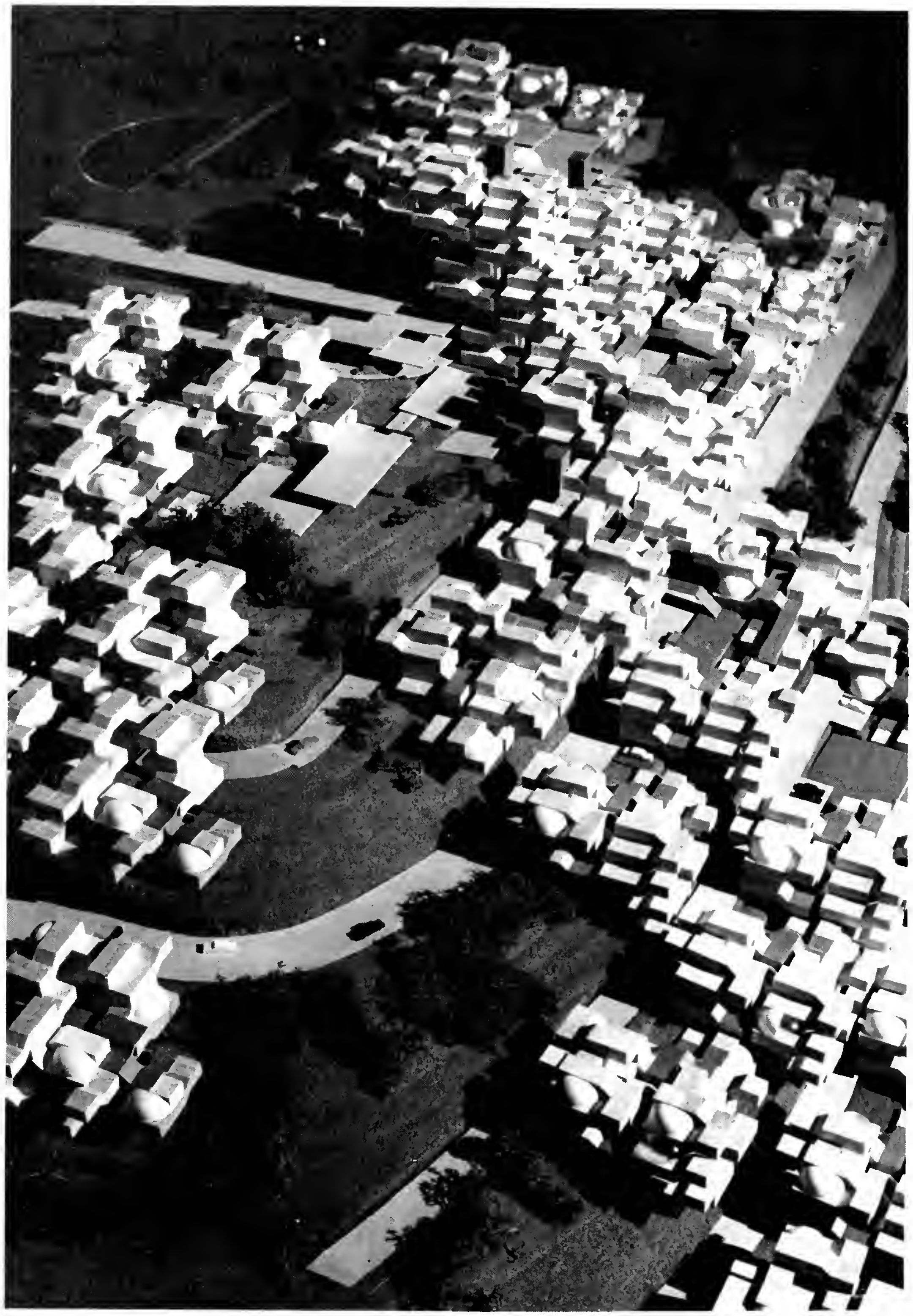
The creation of this infrastructure enabled business and industry to concentrate, and enabled millions of people to disperse around them. The road network, together with universal ownership of the car, made possible the patterns that emerged. To complement this, a multitude of financing mechanisms were invented in the late forties and early fifties by government and financial institutions designed to make possible the acquisition of a piece of land with a house upon it by most middle income American families.

Unfortunately, this intervention in disguise only created distortions which today create a sense of helplessness. Thus we have cities such as Los Angeles choking in congestion and yet too dispersed to support an alternative public transportation system. Today, the energy crisis threatens the basis on which the entire system rests.

In Canada, a place where European and American concepts meet, moderate intervention in the pattern of settlement is being attempted in the form of public *land banking.* The concept of land banking is based on the observation that land ripe for development on the periphery of growing cities is generally bought by speculators who then make it available for development at substantial profits, without any structured or logical plan. If the public were in a position to buy this land and release it for development in a more rational pattern, not only could this be a tool for planning growth, but the revenues which are gained by speculators would then either go to the public or, even better, result in reduced prices for land. Land banking by itself, without clearly spelled out regional land use and development plans, is not very meaningful, and one hopes that these additional tools are to be added to the land banking concept.

In Europe, we have seen over the last few decades much more extensive attempts to intervene in the natural tendencies of urbanization. Most familiar are the British experiments in which, starting in the late thirties right through to the present time, it was decided that new urban centers should be created by public intervention. This policy first gave us the satellite towns surrounding the large British cities and eventually new towns in new development regions. The British have demonstrated the benefits of controlling the size and number of urban settlements and of syphoning growth into new centers. But they also showed us that, where jobs were created without the adequate intensive social environment that people seek in a big city, these jobs could not keep people there. During the early experiments people returned to the congestion and difficulties of London and Liverpool. As the saying goes "Man shall not live by the bread alone."

The split between providing jobs and social and cultural well-being is also clearly demonstrated in the Israeli experience. In the course of almost three decades a number of new towns and cities were constructed, the purpose of which was to disperse the population over the entire country, to stop the growth of the coastal megalopolis and to bring about wider settlement of unpopulated areas. Since most of the land was publicly owned and since it was possible to direct immigrants to new settlements, the establishment of these new centers, such as Beer-Sheeva, Dimona, Mitzpe-Ramon, Eilat, Carmiel and Kiriat Shemone, was theoretically easy to achieve. But, as it was recognized that industry and business would continue to be attracted to the large cities, a whole scaled tax structure of incentives based on



Habitat Israel

development zones was created to attract business to the new development areas. In retrospect, it is clear that with all the tax and other economic incentives, the coastal regions have continued to grow disproportionately and the experiment in dispersal has thus far failed. It is also clear that one of the major reasons for this is due to the limited cultural and social life in the new setlements in comparison with the larger cities. Hence the issue: Dispersal cannot be achieved as long as the qualities of life offered are not comparable to the metropolitan city.

Only in China which I visited in 1973 do we find in recent years a truly radical approach to the whole subject of urbanization and dispersal of population. The Chinese approach to urbanization consists of a number of unorthodox theories. The first is that it is not necessary to concentrate industry, and even if it is less efficient to disperse industry throughout the countryside, there are social and economic benefits which make this price worthwhile. Thus, the Chinese suggest that industry can be integrated with agriculture. It can be dispersed throughout the countryside and not necessarily related to large urban centers. Peasantry and villages are compatible both with agriculture and industry; a large urban structure is not a prerequisite to industrialization.

Another objective of Chinese planning is to limit the size of the existing metropolitan centers. At the present rates of population growth, this means massive migrations from the present large cities such as Canton, Shanghai, Naking and Peking to the countryside and to the smaller cities. These mass migrations of young people to the countryside are achieved through a massive persuasion program through indoctrination as well as rigid controls which, within the Chinese framework, are possible. The location of the particular job are prescribed by the state. While it is true that the rigid population controls established over the existing cities would be impossible to implement in most developing countries within their present political frameworks, it is also true that the general philosophy of dispersal and integration of industry and agriculture and the attempt to establish smaller communities is very relevant and directly applicable to the developing countries.

In a recent conference in Iran, I raised the issue as to whether a Tehran of ten million is justified in an Iran of thirty million; whether ten cities of one million are not more rational than one of ten, or whether fifty cities of two hundred thousand are not more relevant than one of ten million. The number and size of communities and their geographic distribution within the country as a whole are therefore the most urgent issues facing developing countries today. The mechanisms which would make it possible to disperse population, to avoid or improve on the mega cities of the West, should get the most urgent attention in developing countries.

The quality of life of the individual and the family are determined by this level of decision making even more than by budgets for housing and the success or lack of success of the design of a particular community. First, the rationalization of the pattern of settlement can be furthered by controlling land use, whether it is accompanied by total public ownership or the control of the use of privately owned land. The rational designation of various land uses is the most potent tool for urban planning.

The second mechanism is control over the location of industry. It is essential that developing countries retain the power to prescribe the distribution and location of industry throughout their economy.

Third, and perhaps the most constructive structuring force over distribution, is the impact of transportation systems on the patterns of urbanization. Certain transportation systems would enable the kind of mobility and speed of communication that would encourage particular patterns of settlement whereas others would do the opposite. Mobility always eases the needs and problems of dispersal. Efficient transportation available to the masses is therefore a key to dispersal. The decision as to which trunklines or systems to build first also establishes the development of the urban regions within a country. Transportation systems would seem to be more effective than tax exemptions, sliding tax scales and subsidies to industry, in their influence on the organic substance of life in the city.

New concepts in transportation can create a new breed of regional cities and can bring about the true integration of rural and urban life, not merely through the locating of industries in the country but by integrating the rural peasantry and the urban proletariat into a single society.

Density is the most critical factor affecting the quality of life of the individual habitat in relation to the standards of environment. This in turn must be related to the question: What is a minimum population in a community necessary to support the choices and amenities required for a rich urban life? In my own work over the past ten years, I have attempted to confront and clarify the interrelation between density and the standards of environment. As I pointed out earlier, standards of environment relate to the quality of environment in measurable terms such as the size and quality of the space of a house, the availability or lack of availability of a garden space, the quality of access to a house, the community spaces for children and adults, privacy and the range of amenities available within a community. These questions of standards were highlighted in confrontations in connection with the development of the new town of Fort Lincoln, in which the Department of Housing and Urban Development decided to initiate, together with local agencies, the construction of a new town in Washington, D.C., and more recently, in connection with the development of the new town of Coldspring in Baltimore, Maryland.

While the overall master plan for Fort Lincoln was being prepared, it was decided to invite three architects, working with three different building technologies, to build small prototypes of some two hundred units each on a small section of the site. The United States Department of Housing and Urban Development (HUD) had appointed Tom Rogers, a research physicist from the Department of Defense, to head their experimental program. Rogers thought that these three prototypical projects, once built and observed, would shed

some light on the overall pattern of development to be adopted for the town. His objective was to build the three prototypes, and to establish clear and rational measures of achievement or of quality, in order to reach conclusions concerning the future construction in the new town. As a scientist he took for granted that in the building and environmental design professions methods for measuring quality were as readily available as they were in science. But in a brief discussion with the three architects, it became clear that there were no accepted and known ways in the profession for measuring the quality of environment and therefore coming up with a cost benefit assessment of the value of the product.

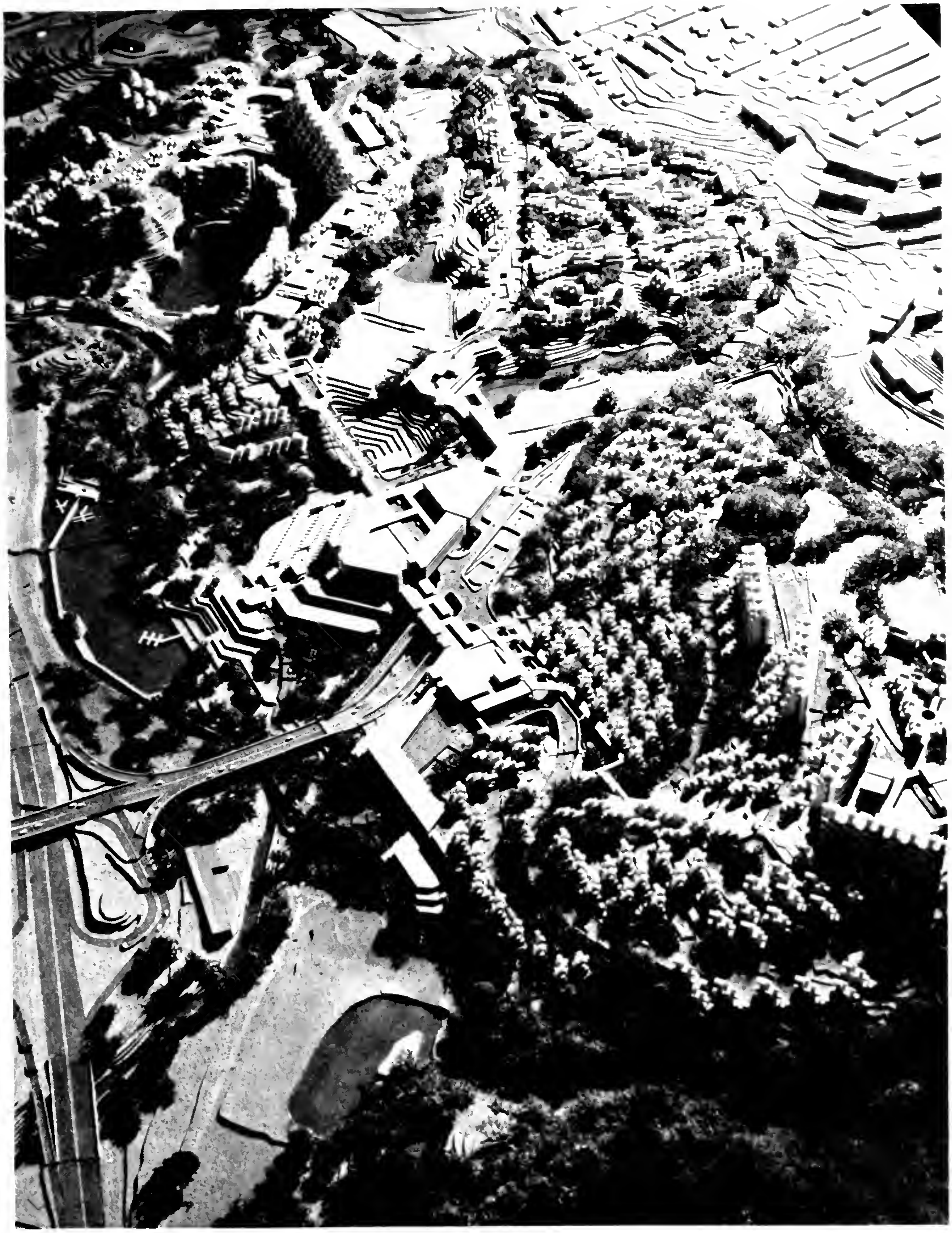
The Fort Lincoln experience proved that in the absence of environmental standards or environmental codes, it is neither possible to give clear programmatic requirements to the designers nor is it possible to measure the success of the design. In the absence of clearly stipulated environmental standards, it is impossible to establish budgets and to debate at the public level the appropriateness, or lack of appropriateness, of expenditures for housing, because it is impossible to measure it against any given quantitative and qualitative measure. Thus, many designers find themselves in a constant debate with public authorities and their bureaucracy because their goal in the sense of environmental quality is never clearly enough stated to make a case for the support of certain decisions.

The opposite example is to be found in the development and construction of the new town-in-town of Coldspring in Baltimore, Maryland. Here the roles were reversed: the Municipal Government through its Housing Commissioner decided to develop a site of some 300 acres of vacant land within the city for the construction of a new town-in-town. The departure point for the authorities was that they were dissatisfied with the quality of urban environment attained through the normal development process in the City of Baltimore and elsewhere in the country. The quality of housing, and of the overall urban environment, the social structure of new communities, the variety and quality of social facilities, were all considered to be unsatisfactory.

In commencing work on the project, we therefore had clearer parameters which demanded reassessment of the quality of environment normally attained through projects done by developers. This was achieved through an intense dialogue with the community surrounding the new town and potential inhabitants as to the environmental amenities which they considered important. The results were that the designers worked with clear objectives in view and when the objectives conflicted with the economic parameters of the market place or with the accepted framework of public expenditure, it was then possible to challenge this framework and to try to find ways and means by which it could be modified in order to meet the environmental objectives established. When the project is completed, and if it is as successful, as I believe it will be, in transcending both the physical and social quality of environment which is generally available to middle income families in the United States, it will succeed because the authorities who initiated the project recognized from the outset the need for clearly articulated qualitative objectives.

The issues are, however, most complex. In 1969, we were commissioned by the Ministry of Housing of the Government of Israel to develop new building types which would utilize advanced industrialized building methods and which would also set out to improve upon the quality of environment, the relationship of buildings to site, and the individual environment surrounding the family. The studies indicated that, industrialization and its benefits notwithstanding, any improvement in the quality of environment has a price tag attached to it. If the particular technology can cut costs, it can do so for the most banal and simplistic building as well as for the more complex improved version. If industrialization can offset the cost of giving a roof garden to a dwelling unit, it also stands to reason that by omitting the roof garden, the same technology would build the stereotype unit cheaper than conventional means. The decision then rests on the simple truth that there is a price tag to quality in the environment, and as pressure mounts due to lack of funds because of other national priorities or because of the sheer quantity of housing needed, there is always a conflict between quality and quantity.

This economic condition which pervades the entire housing field, means that the issue of optimal housing densities is very critical indeed because it is not generally recognized that density of housing has significant economic repercussions. Let me be specific. It is generally assumed that there isn't a dramatic price difference per unit between low density housing (one or two stories high) and high rise buildings, particularly if we can ignore the price of land. But this assumption is totally false if we recognize that the equating of low and high density housing has only been possible through a successive deterioration in the quality of the environment as density has increased. It is not for fashion or fad that middle income



Coldspring New Town

Americans have preferred the single family suburban house over any other form of housing. Its private garden, its sense of identity on its own land, its relative privacy as it is separated by space from the adjacent dwellings, and its easy and pleasant access through the street system by car, are infinitely better than double loaded corridors, beehive cells on the twentieth floor without open outdoor space, in which acoustic and visual privacy is limited, as found in the typical high rise building. But to provide gardens, open walkways and pedestrian streets and perfect acoustic privacy, are all expensive propositions in the high density environment. Acoustic privacy between two dwellings touching each other is much more complex than between houses five meters apart, and the same is true for practically every environmental consideration.

Coldspring New Town Clusters

Similarly, as density increases, site considerations are more complex. Parking vehicles becomes more and more difficult until either the entire site is covered by asphalt and cars, or there must be structured parking on two, three and four levels, with the obvious economic repercussions. On the other hand, as we reduce density and thus simplify the problem of design of the individual dwelling, we also proportionately increase the public cost of distribution of the utilities and transportation; houses dispersed at one per acre or one per half acre require a very elaborate network of sewer and water distribution, roads and sidewalks, not to mention the elaborate expressway system that becomes a necessary by-product of the dispersed low density city. We must therefore weigh heavy community infrastructure and transportation costs as we reduce density, against high individual dwelling costs, if we are to keep the standards of environment up as we increase density. Too often the two frameworks are separated; families buy single family houses at reasonable prices, because the true cost of servicing them is not reflected in what they pay for the house. It is rather a burden for society to carry in perpetuity thereafter. And the opposite is true; families buy housing in an urban high rise situation and pay a higher price and in no way benefit from the fact that higher density reduces the infrastructure and transportation cost that the public must pay for.

The first lesson for developing countries is clear. Any uncontrolled pattern of urbanization that increases densities unnecessarily should be avoided. Densities have a high price tag attached to them and either mean higher expenditures per family housing unit or lower quality of environment. The control over the pattern of urbanization must therefore be the result of clear conclusions on *optimal* density, the size of communities, the size of super communities, and the size of urban regions. In each case, the minimum population necessary to support the respective facilities is a key issue.

The second lesson is that it is impossible to weigh optimal densities and optimal urbanization patterns without having a clear picture of the quality of environment we are aiming to attain. It is therefore necessary (as we have building codes which protect buildings from the point of view of structure and fire safety, and as we have zoning), to develop environmental standards or an environmental code in which the quality of the environment is translated into clear measurable terms covering the entire spectrum of individual dwelling design, the grouping and relationship between dwellings, the meaning of community, the facilities it must provide, and the relationship of residents to their work.

Only with an environmental code will it also be possible to have the kind of political debate and exchange that must, by necessity, take place in order to establish the economic parameters for the environment which we build. Only thus can the price tag be weighed against measurable advantages and the debate take place as to whether we can afford it or not.

In the conflict between the quality of the environment and the cost, one is always drawn to the subject of industrialization of the building process and the mystique that has come to be

associated with this term in recent years. Industrialization, we are told, and I remember saying it myself, would bridge the gap between dwindling resources and economic restraints and the desired quality of the environment. It would solve for us the economic problems posed by the environment and, by extension and association, the suggestion remains that it would also by its very nature create for us a better environment.

But industrialization of building is only a means to an end; it is a tool, no more, no less. In assessing the value of industrializing building processes for the developing countries, it is necessary to free ourselves of some commonly stated theories. The first is the association of the term industrialization with some pretty advanced contemporary hardware. Industrialization, before anything else, is a form of organization. In building, this means large scale production, integrating production and construction, research and development, tooling and design, within one organization. But industrialization could mean, as the architect Hassan Fathy has demonstrated, sun dried bricks, or bamboo panels, concrete walls, plastic bubbles, and a number of other possibilities which have probably not yet been thought of.

The second myth is that industrialization of the building processes in developed countries has no place in the economies of developing countries. Industrialization would only reduce the labor content of building, thus generating unemployment in economies which already suffer from chronic unemployment. Where the cost of labor is as low as it is in India, the argument goes, there is no way to justify the amortization of the very costly equipment which, in the context of these economies, cost two or three times as much as it does in the developed countries. This too is a totally oversimplified picture; it views the economies and the standard of living of the developing countries as static. It does not acknowledge that freeing labor in the construction industry, in long-range terms, frees it to become involved with other industries and services, and it does not recognize the great diversity that the term industrialization of the building process can mean.

A third myth is that industrialization will come about because it will result in drastic cost savings. This too is oversimplication. There are indications that industrialization of the building process is taking place under circumstances where it is bringing about an overall increase in the cost of construction. This is due to the severe shortage of labor, particularly skilled labor, in certain countries and the fact that there is no way to deliver the quantity of construction required without resorting to some form of production that would save labor. A good example is the construction industry in Israel where in the past seven years, with demand for construction being high and the available labor force being unable to keep up with it, both government and private developers are prepared to pay a *premium* for any method that would enable undertaking the construction with less labor.

Similarly, industrialization can and might take place as a result of changes in the availability of certain materials. For decades, if not centuries, the North American construction industry has relied on a ready supply of cheap construction wood. With world prices and supplies changing and the cost of wood increasing manyfold, industrialization might take place as a response to introducing new materials to replace wood.

As for the developing countries, it is more important for them to take cognizance of the dangers of industrialization to the quality of the environment than to speculate on whether it is relevant or not to their particular ways of building. As those countries who have industrialized the fastest and the earliest, such as the U.S.S.R. have demonstrated, there is a tyranny to industrialized building. Industrialized building methods, given free reign to follow their own and natural tendencies, create a monotonous, inhuman, standardized, repetitive environment. It seems that the very nature of contemporary industrialized processes, of the stamping machine, of standardized repetitive elements, of simplistic production, brings about an inhuman environment unless it is counteracted by very inventive, imaginative design methods that introduce permutations and combinations and the variety which is possible by the combination of repetitive elements. As new techniques are introduced, as decisions are made at a larger scale, as designs are developed not for small villages but for whole neighborhoods and sectors of towns, it becomes necessary to deal with the architecture of great numbers. This can only succeed with design methods that can introduce richness, variety and choice and can avoid the ill-considered and insensitive environments which result when the major environmental decisions are made by production engineers.

The developing countries, notwithstanding their limited resources, are at an advantage over developed countries when embarking on the process of industrialization, for they are doing so armed with the experience and lessons of urbanization in the West. Presented with the problems of urbanization, they are able to consider the interlocking and interdependent formulae of regional settlement patterns, the distribution and size of cities, the correlation

Habitat '67, Montreal, Canada, Site of Expo '67

between urban form, density, and the economics of the individual habitat. But it will be impossible to weigh these often contradictory forces without first clearly establishing the objectives of the environment, at the individual, family, community and urban scale.

Thus, an Environmental Code, or Environmental Bill of Rights, or Code of Habitat, whatever we might call it—a check list of objectives, of requirements and of programmatic description—is essential if we are to give clear instructions to the designer, and if we are to be capable of measuring and weighing proposals and products against our objectives. Environmental standards or an environmental code is even more critical as we move from the area where environmental decisions were made at the scale of one house, or group of houses, or a couple of buildings, to an area where huge projects are built all at once; new towns, new communities, new cities, thousands and tens of thousands of dwellings, all conceived at one time, by one group of people. The scale of decision making is many, many times greater than it has even been in the past. As the scale of decision making encompasses the fate and lives of tens of thousands of people, we can no longer leave the design process and its evaluation to intuitive judgment. The need to prescribe and then measure becomes a matter of survival.

Most developing countries struggling with the alternatives and options for a newly built environment possess a long tradition of vernacular rural and urban building. True, conditions and life style are changing, technology is transforming and the numbers are growing. But nevertheless, in the vernacular building traditions lie important lessons and truths which too often, instead of being built upon, are put aside with a sense of uncertainty and even embarrassment. But the urban and rural patterns which have evolved with time to respond to environmental needs are a solid base from which to learn and upon which to build. □

	KNOWN TO OTHERS	NOT KNOWN TO OTHERS
KNOWN TO ME	Arena	Facade
NOT KNOWN TO ME	Blindspot	Unknown

ERRATUM

The *Illinois Teacher* apologizes to author Nelwyn Moore and to readers for an error in the article "Everybody Gotta Feel Like Somebody" in the January-February 1976 issue, page 165. The illustration at the top of the page in Figure A should have been as it appears at the left. Please correct your copy.

CONSERVING ENERGY BY CHANGING SOCIETAL GOALS

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The United States presently stands on the precipice of a severe long-term "energy crisis" of which we are becoming more aware with each passing day. Governmental officials, scientists, industrial leaders, and at least portions of the general public are slowly coming to realize that this problem could well become our dominant national concern in America's third century. Before rushing pell-mell into stop-gap measures dealing with specific aspects of the energy crisis on an *ad hoc* basis, would it not be wise to first formulate a comprehensive perspective on the total problem as an overall guide to policy formation and goal setting?

Such a perspective is provided by Victor Ferkiss'[1] idea of "ecological humanism," derived from the ecosystem model developed by human ecologists.[2] This model focuses on the interdependence between man and nature, as mediated by technology and social organization. To survive in the natural environment and obtain resources necessary for collective well-being, human populations create and utilize technology within an organizational framework that regulates and controls such social processes as resource procurement, production of needed goods and services, distribution of benefits, collective decision making, and conflict resolution. At first glance, contemporary industrial societies appear to have mastered this ecological process with startling success. We are now beginning to realize, however, that sooner or later our present mode of existence may likely come to a dead end as we exhaust the supply of natural resources on which the entire system rests. Constantly growing population and economic productivity are beginning seriously to threaten our environmental resource base, creating an unstable imbalance in fundamental ecosystem relationships.[3] If left unchecked, a new balance will eventually be restored through natural processes, but at catastrophic costs to human welfare. That outcome can be averted, though, if mankind is able—beginning immediately—to alter its present growth patterns and to establish societies that remain in balance with the ecosystem. The ecological humanism viewpoint adds to the basic ecosystem model an awareness of social values and goals and the ways in which they affect human behavior and societal organization. By critically examining our values and purposefully selecting collective goals congruent with our ecological environment, mankind can choose to live in harmony with nature.

From this perspective of ecological humanism, civilization is the process through which a population of people copes with its environment by drawing on available energy supplies and other necessary resources to create and utilize technology in order to develop more effective economic and political systems in an effort to maximize human well-being as defined by societal values and goals. Schematically;

Energy Supply → Technology Utilization → Economy and Policy → Human Well-being → Societal Goals

Proposed solutions to the energy crisis have most commonly focused on the left end of this process, seeking additional or new energy sources. A parallel approach has been to look for new technologies that will more effectively transform available resources into desired goods and resources. More recently, we have begun to ask if our economic and political

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[1]Victor Ferkiss, *The Future of Technological Civilization* (New York: George Braziller, 1974).

[2]Otis Dudley Duncan and Leo F. Schnore, "Cultural, Behavioral, and Ecological Perspectives for the Study of Social Organization," *American Journal of Sociology,* 65 (September), 132-146; Amos H. Hawley, "Human Ecology," *In International Encyclopedia of the Social Sciences,* Vol. IV, ed. David L. Sills (New York: Crowell, Collier, and Macmillan, 1968); Michael Micklin, *Population, Environment, and Social Organization* (Hinsdale, Ill.: The Fryden Press, 1973), pp. 2-19.

[3]Robert L. Heilbronner, *An Inquiry into the Human Prospect* (New York: W. W. Norton and Co., 1974).

systems might be employed—perhaps with some modifications—to improve the efficiency of this overall ecological process. For instance, if the home construction industry were more adequately capitalized, would builders feel they could afford to install better insulation in houses? Or should the government ration gasoline to insure that everyone can obtain a minimum supply?

A fresh look at this total ecological process reveals the possibility of a radically new approach to the problem of energy conservation, however. Instead of beginning at the left end of the process, why not concentrate on the right end, with societal values and goals? With some oversimplification, the major value of American society for the past 200 years has been material prosperity, expressed in the goal of maximizing the nation's standard of living through steadily increasing productivity and economic growth. Pursuit of this goal has given the United States the highest material standard of living in the world, but at the price of phenomenal energy consumption, so that this country now uses approximately 40 percent of the world's energy production. Scientists, engineers, and policy makers concerned about the growing energy crisis have typically assumed that this traditional goal of economic growth would continue more-or-less unaltered in the future, so that the basic problem was to discover enough energy supplies and utilize them efficiently enough to maintain growth at its current rate.

A small but expanding segment of the American public is now questioning that assumption, however, arguing that our present level of economic productivity is high enough and that our goal for the future should therefore be to maintain a steady-state economy.[4] Our present economic system is capable of adequately meeting all necessary—and many unnecessary—material needs and wants of the population, so that the purpose of further growth can only be to increase our supply of luxuries. It is certainly true that considerable poverty and near-poverty continue to exist in this society, with the bottom fifth of the population receiving only five percent of the total national wealth while the top fifth receives over 40 percent. But this is a problem of distribution—or rather redistribution—of existing wealth, and could be fully resolved without further economic growth.

Instead of pursuing ever higher levels of Gross National Product, our society might in the future choose to adopt such goals as ensuring that every person's biological and psychological needs were adequately fulfilled; maximizing all opportunities for personal growth and self-fulfillment; improving our educational, medical, and other public service systems; making jobs more personally rewarding and satisfying; eliminating all vestiges of racial, ethnic, or sexual discrimination; creating livable and enjoyable communities; or expanding political democracy to include maximum possible citizen involvement. All such alternative national goals would be significantly less energy demanding than our present goal of industrial productivity. They would, however, require more extensive use of trained manpower, and hence would provide much greater employment than will tomorrow's highly automated factories.[5]

This proposed new approach to energy conservation encourages a society purposefully to choose its own national goals from among a wide range of alternatives, rather than unquestioningly assuming that economic growth is the only acceptable possibility. The society is then no longer governed in such a deterministic manner by its energy needs and supplies, but rather can exercise discretion in planning its future course of action. In this conservation process, the energy requirements of various national goals would be taken into account and balanced against available resources, with the intent of achieving the greatest amount of human well-being with the least possible expenditure of energy and other scarce natural resources.

Deemphasizing industrial production and economic growth as national goals does not mean that the quality of life in a society will necessarily decline, and it may in fact improve as collective efforts are redirected toward solving pressing social problems. To illustrate this point, let us make a brief comparison between the United States and Sweden, using 1973 figures.

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[4] Robert Theobald, *An Alternative Future for America II* (Chicago: The Swallow Press, Inc., 1968); Donella H. Meadows et al., *The Limits to Growth* (London: Earth Island Limited, 1972); John Kenneth Galbraith, *Economics and the Public Purpose* (Boston: Houghton Mifflin Co., 1973).

[5] Ford Foundation, *A Time to Choose: America's Energy Future* (Cambridge, Mass.: Ballinger Publishing Co., 1974).

	U.S.	Sweden
Gross National Product/capita	$6261	$6195
Energy consumption/capita (million BTU's)	349	194
Educational expenditures/capita	$205	$250
Hospital beds/1000 population	8	18
Residence rooms/capita	1.65	1.25
Automobiles/capita	.48	.25

The major point here is that Sweden has achieved national wealth equivalent to that of the United States while using only 56 percent as much energy per capita as does the United States. Moreover, on a per capita basis this wealth is more evenly distributed in Sweden than in the United States. Nor has the quality of life in Sweden suffered from its low energy consumption, as indicated by the figures for educational expenditures and hospital beds for the two nations.

Although many factors undoubtedly contribute to this striking difference in energy consumption between Sweden and the United States, much of the story is told by the last two pairs of figures. The typical American family of four lives in a single family detached house with seven rooms to heat in the winter and cool in the summer: living room, dining room, kitchen, family room, and three bedrooms, not to mention two or three bathrooms, a basement, and perhaps even a heated garage. The same family in Sweden lives in a five-room apartment with living room, combined kitchen-dinette, three bedrooms, one bathroom, and no family room or basement. The rooms in the Swedish apartment are probably smaller than in the American house, they are certainly much better insulated, and all of the buildings in that apartment complex receive their heat and hot water from a central (or district) heating unit. Having lived in one of these Swedish apartments for a year, I would not pretend that it was my ideal of a split-level ranch house with a private swimming pool on a half-acre of land in the suburbs. But it was comfortable and adequate, and any time one wanted more space there were all kinds of public community centers and recreational facilities within easy walking distance.

Finally, we note that in the United States there are almost two automobiles for our typical family of four persons. In Sweden, there is one car per family, and almost all of them are small four-cylinder vehicles. This creates no hardships for our Swedish family, however, for in all the major cities public buses or subways criss-cross the entire community, coming within three or four blocks of all dwelling units, and run every 15 minutes. Why fight traffic, pay $1.00 a gallon for gasoline, and compete for limited parking space, when one can easily go almost anywhere one wants via public transportation? This also pertains to intercity travel, since the publicly owned railway system in Scandinavia offers superb service.

This brief overview of Swedish living styles demonstrates that it is possible to maintain a very high standard of living, provide excellent public services such as education and medical care, virtually eliminate poverty, enjoy comfortable housing and adequate transportation facilities, and yet consume only about half as much energy per capita as do Americans. Clearly the Swedes have a lesson in energy conservation to teach us.

In the remainder of this paper, let us explore more fully the two energy-saving practices suggested by the Swedish experience: living in smaller and better insulated dwelling units, and driving fewer and smaller automobiles. The Energy Policy Project of the Ford Foundation[6] has estimated that each of these trends, if widely adopted, could save approximately ten quadrillion BTU's of energy per year in comparison with current practices. So let us for the moment assume the role of national energy policy makers, and choose as new goals for American society the quite moderate objectives of housing as many people as possible in somewhat smaller and denser dwelling units, and reducing automobile usage.

The first problem demanding our attention is how to implement these new goals on a broad scale. Both social science theory and practical experience suggest a broad range of possible inducement techniques, varying from mass media messages through various kinds of economic pressures to legal requirements and restrictions, but let us focus on one specific approach to organizing collective action, which Mancur Olson[7] calls "selective incentives." His argument is that when one is seeking to provide "public goods," such as energy savings that

[6]Ibid.

[7]Mancur Olson, *The Logic of Collective Action* (Cambridge, Mass.: Harvard University Press, 1965).

will benefit everyone, no single individual normally has any rational reason for contributing his or her small part to the collective effort, for the overall public good will benefit the individual regardless of his or her input to it. In this situation, persuasive appeals will normally fall on uninterested ears, so that unless the state is prepared to force compliance through coercive means, some other method must be found to induce people to contribute their small portions to the general collective effort. Olson suggests that the most effective way of doing this is to offer each individual some kind of selective incentive for participation—a personal benefit contingent upon one's contribution to the collective action, which is in addition to the overall public good received by all. Although some people will choose to remain "free-loaders" on the efforts of others, if the selective incentives are made attractive enough most people will participate in order to obtain them. Moreover, once this process becomes widespread, the holdouts will come under increasingly strong social pressures to join in the collective effort.

What kinds of selective incentives might be offered to move people toward our two chosen goals? Here are some ideas:

(1) Provide rate or tax incentives to utility companies for financing additional insulation in their customers' houses, with repayment by customers spread over sufficient time at low interest rates so that the annual reduction in their fuel costs is greater than their payments on the loan, resulting in a net saving for them.

(2) Eliminate the present tax policy of charging a capital gains tax if one sells a house for a profit and then buys a less expensive house or moves into a rental apartment. Replace these with a tax write-off for all expenses associated with a move to a smaller dwelling unit.

(3) Through a variety of federal loan guarantees and tax policies, reward builders for constructing smaller and more densely arranged dwelling units in planned communities, with public meeting, activity, and recreation facilities to substitute for the space removed from private dwelling units.

(4) Allow a tax rebate on all gasoline bought for small, four cylinder cars, and charge significantly lower excise taxes on these cars.

(5) Make vans or similar vehicles available at no cost to people willing to organize and operate a car-pool to their place of work on a regular basis.

(6) Through federal subsidies, stimulate the construction of various types of personal transit systems in urban areas and charge only nominal fees for usage.

Undoubtedly each of us could think of several more possible inducement schemes, all of which should be experimented with in small-scale trials, with the goal of implementing the most successful techniques on a national basis.

The next problem we must address is to assess the likely social consequences or impacts of these trends. Let us approach this task by constructing a brief scenario of the kind of community we might create in the future. As a functional unit it contains perhaps 50,000 to 100,000 people, although it may well be part of a much larger urban complex. There is a "downtown" consisting of central governmental and administrative offices, cultural facilities (library, concert hall, etc.), specialty stores, and other functions serving the total community. An efficient, free transit system operates between this downtown and all the neighborhood centers throughout the community. Most stores, offices, and factories, however, are located in several neighborhood "business parks" scattered throughout the community, arranged so as to minimize travel distance between residence and the nearest business park. Most people live in the residence area nearest their place of work. Similarly, schools, churches, recreational facilities, and other activity centers are organized on a neighborhood basis, so that everyone can walk or ride a bicycle to a nearby neighborhood center. Cars are totally unnecessary for most daily activities, therefore, and with adequate intercommunity transit systems, many people live quite comfortably without a car. Rather than bearing the expenses of owning and maintaining a car used only occasionally, most people find it cheaper merely to rent a car from the neighborhood rental store when needed.

Within each neighborhood, dwelling units are arranged into "clusters" of approximately ten units each. Some clusters consist entirely of units for families with children, some are designed for couples, some for larger groups of adults, and some are solely for single individuals. But most clusters consist of a variety of different dwelling units, which can be either rental or purchased. A dwelling unit typically consists of one bedroom per person, a living room, and a kitchen-dinette area. In addition, there are a number of common rooms for the entire cluster—a lounge, a TV room, a recreation room, a large kitchen and dining room for group meals, a laundry room, work rooms, storage rooms, and so on. Depending on the location and climate, a cluster may be entirely contained within one building, or may

encompass several separate buildings on a parcel of land. In any case, a central heating/cooling system serves the entire cluster, or in some cases, several adjacent clusters. On the average, there are approximately 1.5 rooms per person, but most of these are relatively small bedrooms. Major appliances, tools, equipment, etc., are owned collectively by all members of the cluster, which considerably reduces consumption demands for these items. A typical cluster consists of 25 to 30 people, with each neighborhood containing on the average about 100 clusters, for a total population of around 3,000 people.

This prototype community would clearly achieve our twin goals of reducing housing units and automobile travel, with considerable energy savings in heating fuel, electricity, and gasoline. There would also be a large reduction in industrial use of energy and other natural resources that would otherwise be required for mass production of durable consumer goods. But what might be some of the social, economic, political, and psychological effects of these living arrangements? Although there is little research evidence on which to draw in predicting such impacts, studies of partially similar situations such as Swedish planned communities, American new towns, Israeli kibbutzim, and communes around the world offer a variety of relevant insights.

The severest problems associated with these trends—which will occur as energy resources become scarcer, regardless of any conservation programs—will likely be in the economy. Approximately one-fourth of our total economy, in terms of capital assets, is directly or indirectly dependent on the production, servicing, and maintenance of motor vehicles. Declining petroleum, iron, and other resources will inevitably lead to a massive decline in this industry, with subsequent reverberations throughout the entire economy. Lower rates of consumption of other durable goods will have similar, if less drastic, effects on the economy. The worst effects of this catastrophic economic disruption can perhaps be avoided, however, if we plan ahead and devise programs in advance to cope with massive unemployment, recession, and industrial decline. For example, as industrial jobs are shrinking in number, service and professional work is requiring growing numbers of people, which suggests that intensified retraining programs should be instigated now.

The social and psychological effects of the trends sketched in this scenario might generally be viewed as beneficial for most people, however. A viable neighborhood organizational structure should result in more effective schools oriented toward local needs, more participation in local interest associations, increased capability of responding successfully to local social problems, and greater overall community cohesion. Cluster living arrangements could provide needed social support for nuclear families, meet many of the social and emotional needs of single and elderly people, free women to participate in the labor force if they wished, and generally give people a sense of belonging to a meaningful group. These living arrangements should also reduce such personal problems as isolation and loneliness, alienation, alcoholism, mental illness, and deviant behavior, because of stronger interpersonal supports and controls and more adequate satisfaction of psychological and emotional needs.

On the political scene, we might predict that this sort of community structure would tend to encourage governmental decentralization—of both decision making and service provision—to the neighborhood level. More generally, political power might become more diffused throughout the entire community, shifting away from city hall and a few dominant industries to a variety of local councils, interest associations, and other groupings. As a consequence, citizens might become more personally involved in political activities directly affecting their lives.

A final problem associated with our new societal goals concerns assumption of responsibility for planning and directing the national effort needed to achieve them. Can and should private business take the lead, should communities attempt to transform themselves, or should the federal government be the principal instigator of this process? My answer is that all three sectors have vital roles to play in the overall effort. Since we are selecting goals for the total society, fundamental policy issues should be decided at the national level. In addition, most of the selective incentive procedures described earlier require the federal government to alter tax policies, provide loan guarantees, or design social action programs. The federal government is also the only possible source for much of the huge capital financing necessary to construct the housing and transportation facilities envisioned here. Since each community is unique, however, the residents of a community—or of a particular neighborhood—should have the final say in planning and developing their own community. Hence local governments would play a central role in implementing national policies and programs. The actual operational tasks of constructing and operating these new housing and transportation

facilities, meanwhile, might best be undertaken by private business firms. Not only would they be under more constraints than governmental agencies to function efficiently, but in addition these new contracts would help offset the business decline resulting from industrial cutbacks.

And what is the role of ordinary citizens in this proposed massive process of social change? Whatever they choose it to be! The process could largely be carried by governmental, business, and organization leaders, with the rest of the citizenry following passively along behind. Conversely, citizens could come to the forefront of the process, acting through various community groups and interest associations to pressure governmental and other leaders to begin acting now before the full force of the energy crisis is upon us. The "citizen involvement" and "participatory democracy" movements have gained enough strength in recent years to suggest that significant segments of the population will, if given the opportunity, take an active role in our national efforts to deal with the energy crisis. But there is also much ignorance and apathy throughout all levels and sectors of the society concerning the severity and immediacy of this problem. Somehow these people must be mobilized for action in the near future if we are to change our basic societal goals toward long-term energy conservation. □

Learning Activity for Energy Use and Conservation

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Students in class may be asked to estimate the amount of energy and other expendable resources they use on the activity sheet which follows. Using approximate estimates such as the numbers of showers, baths, and amount of water used in laundry, dishwashing, watering the lawn, etc., students may record their personal and/or family energy consumption using the categories listed on the left side of the worksheet.

On the right of the page is a column for recording ideas for improvement. The class might be divided into small discussion groups to brainstorm ideas on how each one could improve, that is, decrease use of energy and other valuable resources. The class could then be challenged to try to improve using these ideas.

This exercise could be repeated several weeks later to determine whether improvements have been made. One very easy criterion to measure improvement could be a decreased utility bill. An award could be made to the "Best Resource Saver" in the class.

Some Suggestions for Improvement which the teacher could use to supplement students' ideas include:

Water

- wash only full loads in washer and dishwasher (or wash dishes by hand!)
- keep water cold in refrigerator so that you do not need to run tap water until it gets cold
- don't leave water running while brushing teeth
- use less water for baths and showers
- put a brick in toilet tank to cut down on water waste
- turn taps off completely to decrease wastage through dripping

Electricity

- turn lights off when not in use
- turn television, stereo, and radio off when not in use
- reduce lightbulb wattage wherever possible
- line dry clothes whenever possible
- use blade razor rather than electric razor
- use manual rather than electric can opener
- use regular rather than electric toothbrush
- use hand lawn mower rather than electric or gasoline lawn mowers
- use electric heating and air conditioning with greater respect for conservation

Gasoline

- reduce speed and idling of car
- organize a car pool and share the driving
- use public transportation whenever possible
- walk or ride your bicycle(will be better for your personal energy expenditure, too)
- buy a canoe instead of a motor boat
- buy a smaller car
- have regular car maintenance check-ups

These are just a few examples of possible improvements. Teachers and students should be able to expand these lists considerably.

This type of learning experience should encourage students to appreciate that as each individual makes small adaptations in his/her lifestyle, the energy conservation of the nation will improve without undue hardship to any single family or individual.

INVENTORY OF RESOURCE USE

My Personal Resource Use	How I Can Improve (Cut Back)
Water: calculate number of gallons per day	
Electricity: calculate number of hours electricity is used, number of electrical appliances used 1 day	
Gasoline (Home/Car/Boat): calculate number of gallons per day	
Other: Gas Recycling of paper, etc.	

HOUSING AS A PROCESS

A Position Paper on Housing Education

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A common preconception about housing courses is that they are primarily concerned with the study of houses or the ideal relationship of different houses to "needs" of different types of families. Even though certain demographic variables might be referred to, the expected focus is on the house. The approach which views housing as the realization of "needs" and subsequent selection of a suitable housing alternative does not offer the student an adequate understanding of why some segments of the population are inadequately housed according to standards presented by such a framework. The only plausible explanation for inadequate housing or dissatisfaction with housing would be that the family either does not recognize its needs or lacks the knowledge to choose a suitable alternative. Although the realization of needs and alternatives does play a role in obtaining suitable housing, a family may both recognize its needs and recognize a suitable alternative but remain in unsatisfactory housing. The reasons for the substandard housing conditions are not at the family level. Education as to how to recognize housing needs and choose alternatives is not the answer for change. To gain a better understanding of the possible channels for change, the reasons for inequity of housing obtained, and the mechanism of distribution of housing among families, it is essential to study housing as a process of interacting forces at various levels rather than as a study of things.

The process of housing involves the provision of houses by market mechanisms and the acquisition of houses by particular families. The housing process is affected by decisions and conditions at various levels of the social, economic, and political structures. The types of housing available and the decision making processes of families are limited by actions at these levels which may at first seem extraneous to the process of a particular family acquiring a particular house. To help the student integrate the various components of the housing process, I have developed and used a schematic presentation in my introductory housing classes. The model presented in Figure 1 is the basic framework for the undergraduate housing course, and provides starting and reference points for the topics covered. The model presents the acquisition of housing as a process which has the traditional concepts of "need" and acquired housing as the two poles. The emphasis, however, is not on either the determination of needs or on houses—it is on the intervening processes, which essentially are the determinants of housing obtained.

Need

A basic assumption of this model is that some type of "need" for housing exists. The exact determinants of need and the translation of need factors into specifications such as x amount of y type of need is met by z factor in housing is the subject of much speculation and discussion among housers, but of limited research.

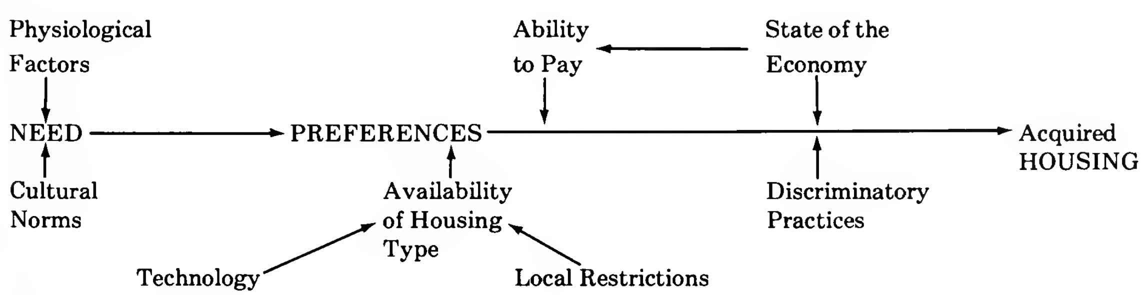

FIGURE 1. A Framework for Presentation of Housing as a Process

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The one area for which qualitative housing need has been substantiated is that of health. In his longitudinal study of the effect of moving from substandard housing to better quality public housing, Wilner found that the only significant change in the residents of the better housing was in health. There were fewer incidences of respiratory disease and more frequent promotions of school children, which was attributed to less absenteeism due to better health. No change was found in the felt ability to get ahead, or other socio-psychological variables (Wilner, 1956).

Several studies have related need to locational factors. Gans found the expressed needs of the Urban Villagers in Boston's West End unrelated to the physical structure of the house itself. However, the density of the area allowed for proximity to friends and relatives, which provided desired social contacts (Gans, 1965).

In Gans' study of the new community of Levittown, residents reported their family life improved after the move to the suburbs. Rather than cause the change in family life, Gans states that the move enabled the families to make changes in life style which were desired before the move (Gans, 1967).

Morris and Winter present a theoretical framework for family housing adjustment which equates housing needs and cultural norms. In their theoretical framework they state

> Housing needs do not derive from minimum shelter needs or minimum health and safety standards in any absolute sense, but derive from cultural standards against which actual housing conditions are judged (Morris and Winter, 1975).

The description of housing needs as cultural norm allows a more adequate explanation of the translation of norms, rather than needs, into specific housing characteristics. On the schematic framework, housing needs are presented as derived from cultural norms. These needs lead to preferences in housing, which in the present context are the specific forms by which the housing norms are expressed. For example, families today may have preferences for family rooms, whereas at the turn of the century families may have felt the same need for a Sunday parlor. Although families may feel that the quality of life is enhanced by these amenities, the preference for specific structural characteristics is obviously not a need inherent to human families, but reflects the patterns of privacy and social interaction acceptable in the social climate of the time.

Studies have shown that housing norms in the U.S. are fairly constant for all income and social classes. Morris and Winter state that families will make great efforts to try to meet norms. Differences in housing obtained are not easily attributed to differences in expectations or desires (Morris and Winter, 1975). The central portion of the model is presented as an introduction to the various factors which help determine whether housing preferences are met. The constraints to housing, some of which are presented in the model, are perhaps the most essential portion of a housing course, and of utmost importance to understanding policy and possibility for change.

Ability to Pay

Perhaps the most limiting factor is the ability to pay. Simple observation shows that in our system of rewards, people with money have good housing and people without money don't. However, it is becoming clear to greater numbers that the ability to pay is not just the product of the Calvinistic virtue of hard work. The state of the national economy plays a large role in the individual's ability to pay. The current state of the economy is a case in point. Due to inflation, the cost of housing is increasing rapidly. As an effort to curb inflation, money for consumers to purchase this expensive housing is increasingly hard to find, and expensive. The cost of money has additionally resulted in a slump in the homebuilding industry. This affects the amount of housing available to consumers and drives prices up due to the economics of supply and demand. Only those able to pay can purchase. The average working man can't. Increasing numbers are finding the housing problems are beyond solutions of family budgeting or realization of alternatives.

Availability of Housing

Community decisions such as zoning regulations, building codes, and minimal acreage requirements affect the availability of various types of housing. Originally designed to prevent unhealthful activities such as industry near residential areas, zoning has been used

traditionally for racial segregation and more recently as a means to economic segregation since racial segregation is no longer legal. An example of economic segregation is the zoning regulations which exist against mobile homes. Although considered by the residents to be satisfactory housing (Lindamood, 1974), in many communities they are prohibited (Greenwald, 1970). This discrimination has ramifications beyond housing. Most industrial growth in the sixties took place in peripheral locations, but most low cost housing is in the central city. Chicago, for example, has jobs available in the suburbs but unemployment in the city. Prohibitive transportation costs coupled with restrictive zoning and building codes prohibit working class people from living in the areas where jobs are available. The restrictions not only eliminate a housing alternative, but lead to discrimination in the areas of jobs, education, services and other opportunities as well as housing.

Availability of housing is additionally limited by discrimination based on sex. Lending institutions have traditionally discounted women's earnings, whether as a wife or as a single female. Some consumer economics texts state that a family should not expect any of a wife's earnings to be counted if she is under 35 and does not have a professional degree (Cohen and Hanson, 1972). The FHA manual stated prior to October 1965 that the income of a young wife should not be counted. The policy was based on the idea that women would quit working to have children, and their incomes were unpredictable (Pennsylvania Commission, 1973).

In January 1974 the Federal Home Loan Bank Board stated that member institutions were no longer to discriminate against women in their lending practices. The forms of discrimination involved not only the refusal to count the wife's earnings, but requirements of those to whom they did lend money to make statements which constituted an invasion of privacy. Bess Myerson reports some of the experiences that women have had to face in order to obtain mortgage money. One mortgage company required the following affadavit:

> I am now taking birth control pills under a doctor's supervision. If the pill fails, I will immediately take steps for an abortion. If for some medical reason I must stop taking the pill and there are no other adequate means of birth control available, my husband will undergo a vascetomy. We have already agreed upon eventual vascetomy to remove all chances of pregnancy. Neither I nor my husband ever wants children (Meyerson, 1974).

Discriminatory lending practices supposedly protect lending institutions against default. Under present laws, however, women have more choice concerning unemployment. The Equal Opportunity Commission guidelines on sex discrimination state that employers must extend all temporary disability benefits to women who become pregnant and require maternity leave. This allows women to return to work, permitting families to make their own decisions concerning unemployment, and pregnancy does not automatically mean loss of salary. Even without the new protective measures, if lending institutions had applied their own logic to the statistics available, they would have refused mortgages to married couples. One bank which has not discounted women's earnings reports that 90 percent of their defaults in home mortgages are due to marital difficulties, not pregnancy (Pennsylvania Commission, 1973).

Racial Discrimination

Racial discrimination in housing is well documented. Segregation in housing is more than one group of people making another uncomfortable in a neighborhood, or the decision of races to live in different neighborhoods. Discrimination is strongly ingrained in U.S. housing policy, real estate practices, and community growth patterns.

The real estate profession has a long history of encouraging discriminatory practices and myths concerning the desirability of segregation. A 1922 textbook published by the National Association of Real Estate Brokers (NAREB) and used to train brokers stated that "the purchase of property by certain racial types is very likely to diminish the value of other property." In 1950 the NAREB code of ethics stated:

> the realtor should not be instrumental in introducing into a neighborhood a character of property or occupancy, members of any race or any individual whose presence will clearly be detrimental to property values in the neighborhood (Civil Rights Commission, 1973).

Although the realtors now state their support for fair housing, for years the housing available to minorities was severely limited, and the patterns established under early limitations still exist.

Local governments have often gone beyond the limits of law in the establishment of policies which affected community growth patterns. The Supreme Court declared zoning ordinances requiring block by block segregation unconstitutional in 1917. Despite this, racial zoning was still established by communities well into the 1950's (Civil Rights Commission, 1973).

Another mechanism used for segregation was the restrictive covenant, which was a written agreement between the seller and buyer, in which the buyer agreed to not sell or rent to members of a particular race, religion, or ethnic group. This form of restriction was considered so desirable that in 1937 a leading national magazine awarded ten communities a "shield of honor" for restrictions they had against the "wrong kind of people" (Civil Rights Commission, 1973). In 1940, 80 percent of Chicago was covered by restrictive covenants prohibiting black families (Abrams, 1965).

When the federal government became involved in housing in the 1930's, many of the practices of the real estate industry and of local governments became federal policy. The Home Owners Loan Corporation established in 1933 to assist refinancing of mortgages in foreclosure, adhered to a policy of residential segregation (Abrams, 1965). Thus the opportunity for many white families to supposedly make it on their own was denied to most minority families.

FHA financing, which made homes available and home ownership a reality for many whites, served to increase differences in housing obtained by making loans and thus home ownership easy for whites and difficult for minorities. From 1935 to 1950 the FHA underwriting manual stated "If a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same racial classes" (Civil Rights Commission, 1973). This meant that the post WWII communities financed by FHA either had to be all white or all black. If a builder desired to build for an integrated neighborhood, he would likely not have received FHA financing, as he had to show that the development would be economically sound, which meant segregated and white. The stability and desirability of a neighborhood was judged by the "social class of the parents of children at the schools." A neighborhood was rated as less desirable if inhabited by a "lower level of society." FHA placed neighborhoods occupied by the "wrong" race into the same category as stables and pigpens (quotes are from FHA manuals, Abrams, 1965).

The patterns of racial segregation which exist today cannot be attributed entirely to choice, ability to pay, need for housing, or decisions made at the family level. The restrictions of the federal and local governments have to a great extent determined the patterns. The housing patterns have resulted in differentiation in non-housing areas. For many middle and working class families the investment in a house represents the only substantial savings. With inflation of housing prices, home ownership has improved the economic situation of many families. This form of savings has been denied to many minority families (Kain and Quigley, 1973). Due to discriminatory housing patterns, minority families are also denied jobs in the suburbs, schools, location and types of housing which they may prefer and feel fits their families' needs. Even minority families with the ability to pay for better housing have often been denied these amenities. It does little good to discuss need and houses until the delivery system allows equality in the availability of houses.

Implications

The interacting elements of this model present several questions concerning the nature of the housing problem as well as the suitability of past and future policy decisions. The most basic question posed by a model of housing process is whether the housing problem is a problem with houses or in fact is a symptom or reflection of other problems such as poverty and discrimination. Policies are adapted according to the viewpoint of the nature of the housing problem taken, reflecting the point at which it is thought most beneficial to intervene in the process in order to effect change. If the problem is in the housing units, then accelerated building of units is the answer. If housing is viewed as a component of other problems, then housing should not be dealt with in isolation. Programs such as negative income tax or housing allowances would take some of the other considerations into account (Hanna, 1974).

The model presented is not meant to be complete. The purpose is to give students an understanding of some of the factors associated with the process of housing. After the deterrents to obtaining adequate housing are understood and those problems solved, perhaps then it would be possible to determine the effects of houses on people and the ideal relationship between need and house.

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Readers who are unfamiliar with this journal may wish to obtain more information about it. Subscription is part of the membership dues of the American Association of Housing Educators, Department of Family Economics, Justin Hall, Kansas State University, Manhattan, KS 66506. (Active membership $15.00/Student membership, $6.00.)

HOUSING EDUCATORS JOURNAL features articles on current housing issues, housing education, book reviews, research reports, housing legislation, and AAHE news.

THE HOUSE AND ITS SOCIAL-PSYCHOLOGICAL ASPECTS

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All great forms of human architecture incorporate an attitude toward life. This is true of the home, the garden, the temple, the village, and the metropolis. To be successful esthetically and practically, buildings and other artifacts must reflect the spirit of the institutions from which they originate.[1]

René Dubos

The house more than any other structure in our built environment affects our attitude toward life. It is within our home that our deepest emotions are expressed. It is within our home where lasting effects are impressed on children during the early stages of development. What intangible characteristics of a house produce an environment where the family's social-psychological needs are fulfilled?

ROOTEDNESS

Families in the United States move on the average of once every five years. The feelings of rootedness and belongingness are not being fulfilled for many of our families. Vance Packard, in his book, *Nation of Strangers*, writes "We are rapidly losing several critical ingredients of a civilized, salutary society. . . . We are seeing a sharp increase in people suffering alienation or just feeling adrift, which is having an impact on emotional and even physical health."[2]

Before the Industrial Revolution, our house and our place of business were often one and the same structure. When the children married they frequently continued living within the same neighborhood to help run the family business. Few of us have this connection with our past in today's technological society. Both the sterile, high-rise apartment building with its drab, concrete parking lot, as well as the endless miles of suburban sprawl, have all but destroyed the concept of rootedness.

It becomes important therefore that we explore ways to create a feeling of rootedness. The furnishings we select for our interiors may provide links with our heritage. Although we move frequently we can take our familiar and valued furnishings with us. One of the most interesting houses I have visited is the home of a family that has moved numerous times. The focal point in the living room is a collection of artifacts; some objects have been in the family for four generations while other pictures and ceramic pieces are works of the children. This family has created a sense of heritage in their home in spite of the frequent moves (Illustration I).

The feeling of rootedness created through using possessions from the "old house" is well known by managers of housing projects for the elderly. In the more successful projects the elderly are encouraged to bring their own furnishings with them. Adjusting to living in a new environment is often times extremely painful for elderly people. To some degree, permanence of furnishings will take the place of permanence of their homeplace.

REPLENISHMENT

Home is where we go to replenish our minds and bodies to meet the demands of our daily lives. As our society continues to become more urbanized there is an increase in the number of contacts we have with other individuals. Constant interaction with other people can produce stress. Home is the only place many of us can go to escape constant contact with

[1] René Dubos, *So Human An Animal* (New York: Charles Scribner's Sons, 1968), p. 176.
[2] Vance Packard, *Nation of Strangers* (New York: David McKay Co., Inc., 1972), p. 5.

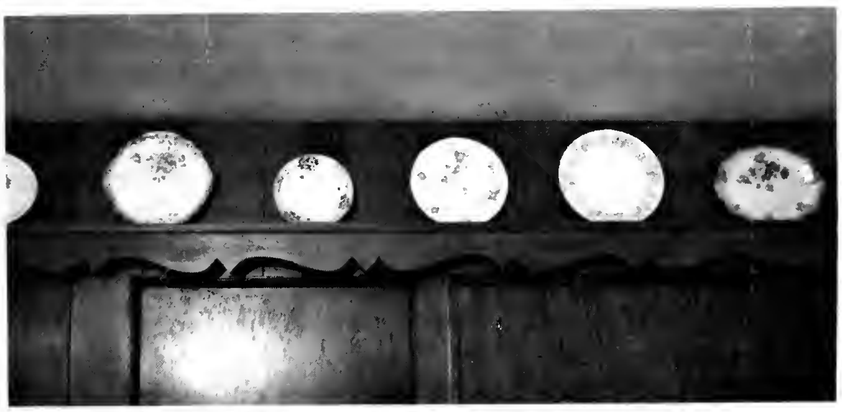

ILLUSTRATION I—Upper left: The concept of rootedness is expressed in this extended family house in Amana, Iowa where the main house has been enlarged for the grandparents and married children. **Upper right:** High-density apartment living can result in a loss of group identity, making the feeling of rootedness almost impossible. **Lower left:** A plate rail displays family heirlooms that provide a feeling of continuity and rootedness for family members.

other people. We also simplify our lives as we go home from the high levels of complexity produced in our urban environment.

Safety and Security

Only if the home environment is safe and secure can proper rest and peace of mind be obtained. Each year, there are more than 20 million injuries in U.S. homes. Many of these accidents result from unsafe design and poor quality construction. Stairs with loose runners or treads, bath tubs and showers with slick finishes, and electrical outlets placed close to the water faucets are leading causes of home accidents. Many of these hazards can be simply and inexpensively remedied, e.g., applying abrasive no-slip tape to the tub or shower floor.

The house and neighborhood should also be safe from human threats. If family members are afraid to come home after dark or if the mother is afraid to go to the laundry room, insecurity will result. Studies have indicated that youngsters living in high-rise apartment buildings have more respiratory illnesses than youngsters living in single-family houses because they spend less play time out-of-doors. In many of our congested urban areas, parents hesitate to let the youngsters go outside to play for fear of their being molested or harmed. Replenishment cannot be effective in an unsafe, insecure environment.

Stimulation

A home that offers a stimulating atmosphere will replenish family members after the drudgery of daily activities. Psychiatrist Matthew Dumont states in his book, *The Absurd*

Healer, "There is in all of us a biopsychological hunger for stimulation as basic and urgent as our need for food and water."

Visual stimulation may be easily and inexpensively achieved through the use of colors and textures in furnishings and accessories. Other multisensory stimulating experiences may be achieved by pursuing hobbies and leisure activities, and the homes should provide the needed space for these activities. Especially important in homes where there are preschool children is the need for stimulation. The amount of varied stimulation a small child experiences influences his potential I.Q. Over-stimulation can cause anxiety, under-stimulation can cause apathy; therefore, stimulation becomes extremely personal depending upon the individual and the amount of stimulation the individual encounters outside his home environment.

REINFORCEMENT

The home and neighborhood we choose to live in, as well as the furnishings and accessories we select, are important choices as they can reinforce greatly our self-image. Our house is an extension of ourselves. The home we live in reflects how we view ourselves in relation to the rest of society. A reason why colonial styles continue to be popular in house design is symbolism. Colonial styles give some people a feeling of security and a continuity with the past. The symbolic inference is just as important to some people as the number of square feet of living space.

Self-esteem

Unfortunately, many in our society have limited freedom in choosing their dwelling or its furnishings. Low-income individuals and families who are forced to live in slum conditions or in government-supported housing often have little hope for their futures. They may also experience a loss of self-esteem. If people have low self-esteem because they are ashamed of their living environment, is it any wonder they neglect and even abuse their housing? Residents feel resentful and confused when the appearance of the house does not enhance their self-image. Psychologists know that loss of self-esteem can cause mental illness. There is also a direct relationship between poverty and mental illness.

Creativity

For many of us, our home is a place where we can express our creativity and individuality. This will give us a sense of control over our environment and a feeling of greater autonomy. Dr. Dumont believes that if an individual does not have some feeling of environmental mastery that person will suffer emotional disability.

In recent studies on "job satisfaction" the lack of creativity is found to be a basic cause for dissatisfaction. People who experience little challenge in their work may release their creative energies in their home. Each member of the family should have the freedom to express an individual touch, even if it is a limited space. Just a bulletin board and a small desk surface in a child's room can offer an area to display collections and works of self-expression.

We should be designing and building homes that offer the greatest amount of flexibility possible, thereby providing for families to individualize their rooms. It is predicted that homes will be smaller in the future for these significant reasons: families will be smaller, and the cost of housing will be greater. Although the homes will be smaller, the interiors will appear more spacious with the trend toward fewer and larger rooms divided by semi-transparent movable partitions. Families will be able to select their own interiors—changing the size and shape of rooms when they wish.

RELATEDNESS

One of man's basic needs is to interact and to relate with others. Anthropologists agree that man relates most effectively in small groups. Our society controls the boundaries of man's intimate group interaction through the family system. Although family size varies, the group normally stays within the limits of being able to fulfill the need of each individual.

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[3]Matthew Dumont, *The Absurd Healer* (New York: Science House, Inc., 1968), p. 55.

House Design and Interaction

A house should be designed to promote interaction and social contact. A primary purpose of a home is to foster human relationships. The interaction and communication should be free and spontaneous. Many design features that force people together cause irritation and annoyance because a task is interrupted.

Examples of two floor plan arrangements, both with the same number of square feet are illustrated in Figure 1. In Plan A, the arrangement will force family members into interaction that may cause annoyance. Notice that if a person enters the rear door, it will be necessary to cross through the work triangle in the kitchen to reach any other area of the house. This not only can be disrupting to the person who is preparing a meal, but also is a source of danger if s/he is working with hot food.

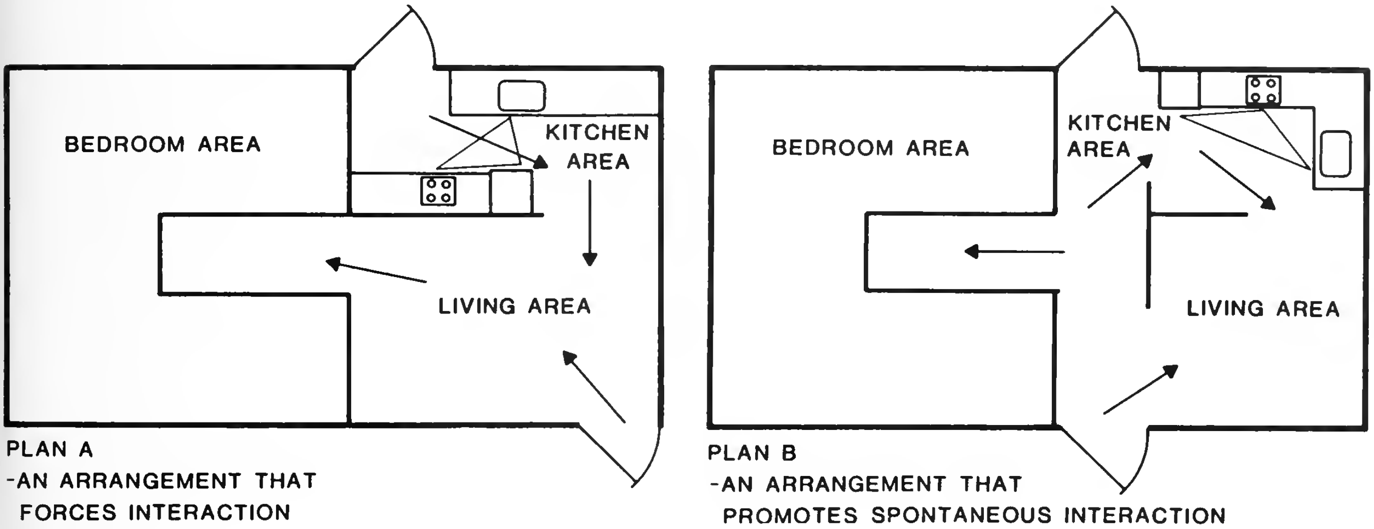


FIGURE 1

In Plan A, a person entering the front door will inevitably have to cross through the conversation circle in the living area to get to other areas of the house. This, too, will cause irritation if other family members and friends are visiting in the living room.

Interaction may be free and spontaneous in Plan B. Traffic flows easily to the three major areas of the house. One does not have to interrupt a task to enter into passing conversation.

House Design and Privacy

A house should be designed not only to foster group family relationships, but also to foster relationships between individual members and to allow for an individual's privacy. Crowded living conditions frequently result in a lack of privacy. The degree to which privacy is satisfied in American homes is positively correlated with income.

A leading cause for the lack of a harmonious sexual life between married partners is the lack of privacy from the children. Parents need privacy from their children and children need privacy from their parents. Children need a space where they can pursue their hobbies or entertain a friend without constantly being in the presence of their parents (Illustration II). A home that can provide privacy for each family member to explore his or her own interests and yet foster interrelationships between family members will promote the growth of socio-psychologically healthy individuals. □

ILLUSTRATION II: A basement recreation room provides a space where teenagers can entertain their friends without the constant presence of their parents.

TOMORROW'S FURNITURE TODAY

Harold H. Alexander
Associate Professor
Interior Design
University of Illinois

Research has located words such as beauty, beautiful, lovely, etc., most definitely within the dimension of evaluation. As an attitude, this factor or dimension is a particular kind of knowledge that differs from the cognitive and psychomotor domains because it involves a feeling, tone, emotion, or a degree of acceptance or rejection.

At one time these words were the subject for critical discussions, essays, and papers by noted philosophers and educators. This very subjective domain of knowledge enjoyed a strong following and the business of aesthetics and taste was precisely taught. However, the thrust is no longer on dictating taste, and yet, we instinctively react in an evaluative manner when we perceive objects in our environment. We continue to employ aesthetic modifiers, that is, we say "pleasant" surroundings, "attractive" designs, "lovely" colors, "harmonious" forms, and so forth, and when choosing the components for our home or office, one of the ultimate goals is continually to make it "beautiful," whether the word is spoken or left unspoken.

Formerly the pursuit of taste concerned only a few chosen people. Division lines were carefully decided, and the objects considered proper and tasteful were carefully controlled. The consumer of the twentieth century is indeed fortunate; he not only has the right to pursue his own taste, making his own evaluative judgments, but he has an incredible abundance of objects to choose from. He is not only confronted with the continuation of former tastes—copies and adaptations of past styles that perhaps now in another century and under new circumstances are not always deserving of being blindly labeled beautiful—but in addition the consumer today can choose from furniture designs that are original and unique to the present. Upon investigation he soon discovers that beauty is not limited to designs of the past. Current contemporary designs have lost the earlier clumsy, almost primitive, look associated with "up-to-date" furniture and have been refined until they are often exquisite perfection in line, use of materials, and comfort—often rivaling the beauty of the finest furniture of the past. There is also a refreshing and welcome variety of forms within the contemporary idiom. Few consumers, even the antiquarians, cannot find designs that touch a responsive chord.

This was not always the case, however. Practically all of the furniture produced and/or available in the United States before World War II was based upon past styles. Machine-made residential furniture showed little indication of any of the outstanding inventive and original designs that were currently being developed at the Bauhaus in Germany or evolving in Scandinavia. True, the Metropolitan Museum of Art in New York had an exhibition called *The Architect and the Industrial Arts* in 1929 that included interiors and furniture primarily in what is now called the Art Deco style, and five years later the museum had another exhibition that related to the Bauhaus approach to design. As a result of these two exhibitions, lunch counters and kitchens across the country began to gleam with the chrome tubing of the ubiquitous "dinette set" during the 1930's and 1940's, although the restrained elegance of the original German designs were all too frequently missing and little other modern influence can be found during that time.

The terms "modern" and "contemporary" are often used interchangeably to describe furniture designs not based upon historical precedents. However, recent research findings indicate that while the terms are often used to describe the same furniture forms, retail furniture managers prefer to use the term "modern" while furniture manufacturer representatives use "contemporary" almost exclusively. Some authorities, nevertheless, reserve the term "modern" for the spare, metal, machine-made furniture designed at the Bauhaus during the 1920's and use the term "contemporary" for the rest of the functional, elegant furniture produced in the United States and Europe during the past thirty years.

This article is adapted from portions of Mr. Alexander's recently published book, *Design: Criteria for Decisions*, Macmillan & Company.

When then can we say that well-designed "modern" or "contemporary" furniture first became known to the American consumer? After 1940; that year the Museum of Modern Art in New York held a competition for "Organic Design in Home Furnishings." The winners were two young architects Eero Saarinen (1910-1961) and Charles Eames (b. 1907). Their revolutionary design for a chair is one of the most significant innovations in the history of seating furniture. The winning chair design consisted of the back, seat, and arms molded into a single multicurved shell, made of laminated veneer and glue, and formed in a cast-iron mold. (The shell was padded with a thin layer of foam rubber and covered with fabric.) In the original design, the legs were to be aluminum rods, but the war had caused a shortage of that metal, so that the first interpretations of the chair had wooden legs. The significance of this chair is compound: (a) the basic form and construction methods predict plastic furniture fabrication, (b) the use of thin foam padding on curved shells instead of thick padding on flat surfaces, (c) the use of attached metal rods for legs instead of integral wooden legs, and (d) a minimum of individual components required to form the chair. Although never put into production this chair must be considered the "granddaddy" of the many wood and metal, lightly padded, and metal-legged seating furniture designs available today. Saarinen and Eames continued designing furniture and have been most instrumental in establishing the functional, contemporary look in American furniture.

The pedestal chair by Eero Saarinen (1957) is the first chair to completely break with the design tradition started by the Egyptians before 3000 B.C. The one-piece molded seat, back and arms are supported by one superbly proportional pedestal. The cast aluminum base joins the fiberglas top portion without a break in the smooth, upward movement of the pedestal form.

Throughout the 1950's and well into the 1960's the contemporary furniture produced in the United States led the world, followed with the elegant sculptured furniture of the Scandinavian countries. However, in the past ten years the stylistic leadership in furniture design has changed. The exciting and original designs of the United States and Scandinavia have been eclipsed by the developments in Italy.

Gio Ponti (b. 1891) has been one of the major innovators in Italian architecture, furniture, and product design for several decades. Not only have his designs set a high standard of excellence but because of his founding and editorship of the influential magazine *Domus* he has been extremely instrumental in developing and promoting Italian design and is largely responsible for the new renaissance in Italian furniture.

The Italian influence in furniture design and manufacture has been overwhelming and clearly affects both American and Scandinavian designers. Some of the most original and aesthetically satisfying designs in plastics and synthetic materials have been employed recently, and for the first time in history the dominance of wood furniture has been challenged. These designs use the inherent characteristics of plastics and other materials to their fullest. There is no attempt to masquerade one material for another. Plastics do not imitate wood or metal, but rather are revealed as handsome, functional materials themselves, worthy of elegant designs and fine craftsmanship.

The Soriana Series designed by Italy's Afra and Tobia Scarpa reflect the return to "soft" furniture. Having a wooden base and chromium-plated steel exterior frame, the main body of these comfortable pieces is different densities of polyurethane foam. *Courtesy of Atelier International, Ltd.*

The Italian furniture designers are also credited with bringing the thickly padded, rounded look back to contemporary furniture. In contrast with other contemporary furniture,

here *soft* comfort has high priority, a fact almost flaunted by the gathered upholstery and puffed appearance. While some of these designs strongly resemble the heavily padded, spring-filled furniture dear to the hearts of the comfort-seeking Victorians, the materials in these new couches and chairs are a far cry from the many coil springs, wooden frames, curled horsehair and cotton felt padding of the past. Now metal, rigid plastic or fiberglass frames are molded within several densities of polyurethane foam, covered with fluffy dacron fiberfill, and then covered with the upholstery.

What of tomorrow? Will new designs supplant what is now being produced? Of course. Many of the furniture forms we see in the showrooms will disappear while others may prove to be classics and take their rightful place in history along with the Greek Klismos, American Windsor chair, the furniture of Chippendale, Hepplewhite and Sheraton, and the styles of the French Louis'.

While there is risk in predicting the future of furniture design, directions of design concepts, material resources, methods of construction, economic factors and general cultural changes including mass media trends are all useful indicators. Thus, the following can be projected.

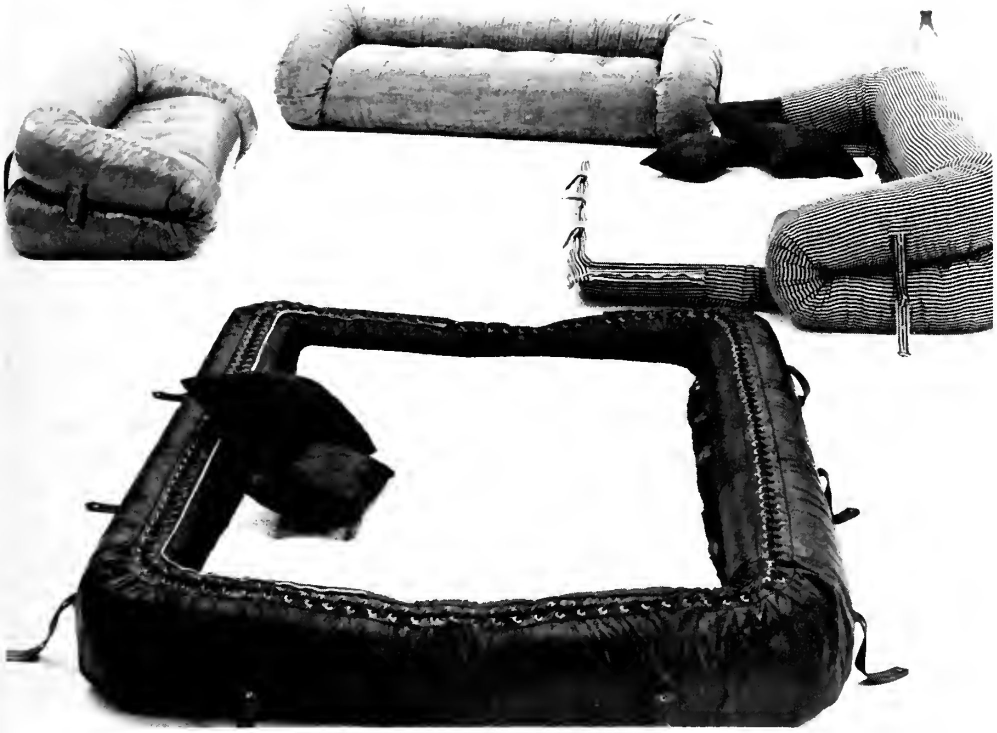
Winner of the Alcoa Student Design Award, these Swedish two-part aluminum clamps holding steel pipes together are an easy and ingenious method of constructing furniture and complete living environments. The arrangement here provides comfortable seating, study area and bed within an 8' x 10' space. Sturdily held together by friction, the materials are all reusable, thus the components can be rearranged into other combinations and for other uses.

Modular furniture seems to be in the ascendancy. That is, furniture, whether it is for seating or storage, is designed and manufactured in sections permitting various components to be utilized in different ways. A couch can be composed of two arm sections with any number of center sections needed to reach the desired length, for example. This is a design concept welcomed by consumers who must change their homes frequently.

The mobility of today's consumers is also reflected in the increased number of multi-use designs. There are not only sophisticated descendents of the old sofa bed and tables of changeable height, but also furniture that can be used in different locations such as in the bedroom or in the living area. The use of casual furniture capable of being used indoors or outdoors is also currently emphasized and will probably continue because of its handsome appearance, rugged materials and usually lower cost.

The natural look has become an important consideration. Not only have traditional materials such as fabrics and leathers become more "natural" in texture and color, but their application reflects their inherent qualities. Even some of the newer materials are used more truthfully. Instead of imitating other materials, the many plastics, for example, are being used forthrightly; a most refreshing change from a few years ago when "plastic" was almost a naughty word.

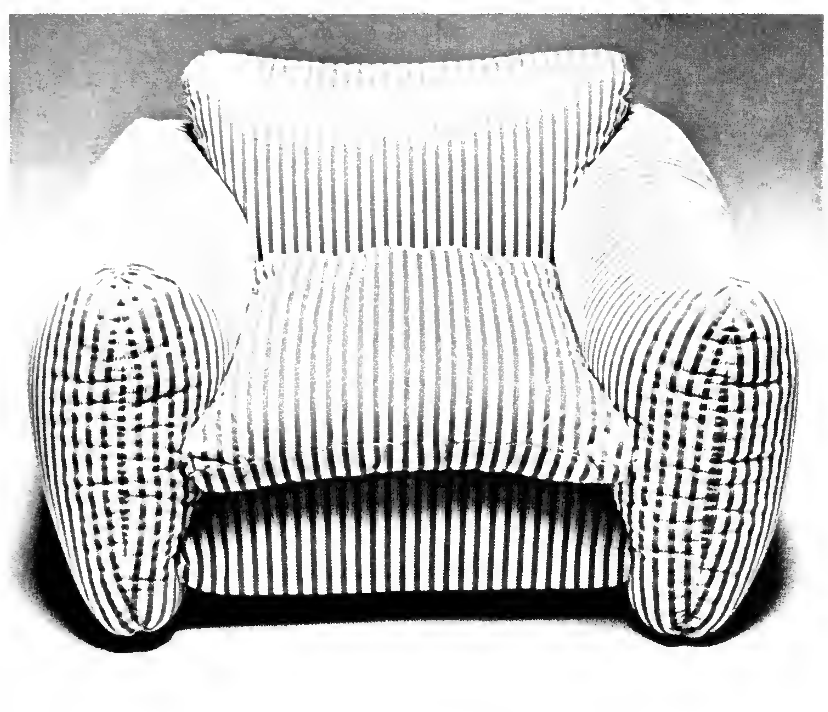
The use of new materials and methods of manufacture are illustrated by the relatively new appearance of fiberglas as a material for furniture construction and the development of



Left:
Versatile and comfortable, this Italian sofa bed called *Anfibio* was designed by Alessandro Becchi. Zippers, buckles and lacing hold the polyurethane and dacron filled components together in a variety of ways. This design clearly expresses today's multifunctional life style. *Courtesy of ICF, Inc.*

Below:
The use of natural materials affecting furniture design is clearly shown in these handsome and rugged pieces. The simple forms are covered with full thickness leather in a most straightforward way, almost as if the thick pieces had been temporarily folded over the chairs and couch. *Courtesy of Stendig, Inc.*

Above:
Appropriately called "Handkerchief," this coffee table of rigid fiberglas appears to be a cloth draped over a box or table. Having an air of mystery and magic about it, this amusing table form has been elevated to the level of Pop Art. *Courtesy of Stendig, Inc.*



Right:
Deceptively simple in appearance, this chair forthrightly called "Pillow" has a rigid understructure padded with different densities of synthetic foam and dacron fiberfill. *Courtesy of Fortress, Inc.*

soft upholstered construction without coil springs. These new materials and methods are not imitating the past, but are being employed in their own right, reflecting the designer's strong awareness of the unique and intrinsic characteristics of his/her materials.

Finally, there is a touch of whimsy in some of the newer designs—especially in some of the Italian pieces. A large baseball glove and a bright red pair of lips are couches. Very realistic boulders are actually soft seats, and a molded foam polyurethane Ionic capital and part of a column is a chair, to name a few. Fun, amusing, and yet, why not? Why does the furniture in our homes have to be spiritless? The past, we should recall, is full of furniture with animal and human legs, bodies, feet and heads of every description.

Yes, the furniture being developed in Europe and the United States is some of the most original and imaginative ever designed. The traditional concepts of what a chair, bed, or table *should* look like, established by the Egyptians over five thousand years ago, have been shattered. The whole posture of the occupants, indeed, the whole social pattern of behavior has been revised to fit the new furniture—or is the reverse true? Beyond doubt, however, none of the furniture being introduced today, regardless of how avant garde it may appear or how unusual its material or manufacture, would have been possible without the historical design precedents. Could the molded plastic forms that are being so freely employed today as chair and couch supports have been possible without the designs of Eames or Saarinen? Could Eames have molded his veneers without the glues and circular saws to cut the veneer that were invented before him? And, what is considered to be very new and exciting today may well be the basis for the newest tomorrow. And so it goes—back to the beginning *and* on to the future. The future holds more promise than perhaps any period in furniture design and it will be up to the designers—and also the consumers—to provide the realization of this promise. □

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LIFE—NOT JUST SURVIVAL

Home Economics and the Utilization of the World's Resources

Hazel Taylor Spitze
Illinois Home Economics Assn.
Liaison Representative
to IFHE

The above theme guided the planning and implementation of the XIIIth Congress of the International Federation for Home Economics (IFHE) held in Ottawa, Canada, July 19-23, 1976. Over 1200 delegates from nearly three score countries participated in the deliberations and heard speakers from the Philippines, Germany, Australia, Canada, France, Sudan, Upper Volta, and Norway in the plenary and subplenary sessions. Of the principal speakers, 5 were men and 7 were women. All of the officers and members of the executive council are women. IFHE was founded in 1908 in Fribourg, Switzerland, and for the first 43 years the presidents were men.

The three days' sessions were based on the ideas of CONSUMPTION, CONSERVATION, AND CHANGE, and discussions followed each day's session. The federation has three official languages and simultaneous translation was provided in English, French, and German. As speakers changed and members applied their headsets to their ears to dial a language they could understand, they had a feeling for the communication problems of such bodies as the United Nations. Evening entertainment included music, a fashion show, folk dancers, a barbeque, and dinner in Canadian homes.

The Executive Council met for two days prior to and one day following the Congress. Reports were presented from a variety of sub-committees including the quarterly Bulletin of the Federation, regional organization, long-range planning, population problems, and finance.

The Council voted to accept the invitation of the Philippines to host the XIVth Congress in 1980 and of Ireland to host the next Council meeting in 1978. New officers for the next four years were elected as follows: President, Frau Monica Tupay of Austria; Vice-President, Miss Maija Inkeri Jarventaus of Finland; and Council members from New Zealand, France, Brazil, Germany, and Switzerland.

Those continuing in office include two vice-presidents, Miss Wanda Young of Canada and Mrs. Alberta Ollennu of Ghana; and treasurer general Frau Vroni Kappeler of Switzerland, along with Council members from the U.S., Israel, Ireland, United Kingdom, Philippines, Sierra Leone, and Korea, Isabel Horne of Australia, outgoing president, will also serve on the Council for another term of four years.

The Secretariat (headquarters) in Paris is headed by Madame Odette Goncet who also serves as Editor of the Bulletin.

Through membership in IFHE, U.S. home economists can join with home economists around the world and be represented by IFHE at such international conferences as the World Food Congress, World Conference on Population, International Women's Year Conference, U.N. World Conference on Habitat, international teacher, consumer, and parent conferences, and such agencies as FAO, UNESCO, and UNICEF Collective members (such as a state home economics association) pay dues of about $150.00 and may send Congress delegates according to their membership. Individual home economists join as Associate Members and pay about $10.00 per year which includes a subscription to the Quarterly Bulletin.

IFHE membership offers the opportunity to help home economists in countries where programs and associations are newer through Congresses, the Bulletin, and private exchange with Associate Members in those countries as well as the Solidarity Fund which helps pay dues for members in such countries with contributions from those able to pay.

The following pages include brief summaries of major speeches distributed at the Congress and are presented with the permission of the Secretary General. Translation from the language of presentation to English was made at the Congress. The full text of all speeches will be published in the Proceedings of the Congress in early 1977.

PROSPECT FOR THE NEXT DECADE

Dr. Frances Magrabi
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Hyattsville, Maryland

The *home economics* profession stands as an *interface* between the *family* and the larger *society*. Thus the *responsibilities* of the home economist are those of a *linker*. On the one hand, the home economist develops new or more appropriate household technology and provides information and training to family members to help them to be more effective in their family and household responsibilities. On the other hand, home economists communicate information about the family's situation and needs to government planners, educational institutions, the scientific community, and to business and industry. How this linking role can best be performed will depend on the changes and pressures for change experienced by families in the next decade, changes and pressures both from within the family and upon the family from without. These pressures will give rise to new and increased needs by families for information, training, and new household technology.

Families in all countries will experience economic pressures due to limited supplies and changing prices of food, energy, housing, labor, and raw materials; and the related public policy pressures that urge families to change traditional practices, adopt family planning measures, conserve energy, materials, and other resources, and contribute their efforts to the development process. Some pressures experienced by families will come from within the families themselves as they press for change in order to better their condition or sometimes resist change, preferring the security of established patterns or the value of tradition and custom.

In addition to changing conditions in society at large, families themselves are changing and for this reason, also, have changing needs for information and training and needs for appropriate household technology. In many countries we see more fragmented households; often these are households in which one adult assumes all those family responsibilities usually shared by several adults—husband and wife and perhaps grandparents or other relatives. We see more single-person households—more elderly persons living alone or in institutions, more migrant workers separated from their families, and more young adults cut loose from family and community of origin. The roles of men and women are undergoing change, which may often mean that women assume part of the burden of income-earning while their household responsibilities decrease little. We also see a progressive transfer of some of the authority and responsibility of the family over its members to schools and other social or governmental agencies.

How home economists develop their linking role will differ among countries, depending on the particular conditions, trends, and pressures for change within the country. Home economists have, however, a common need for more scientific information and technology based on indigenous, family-oriented research; a common responsibility to provide families with the information, training, and household technology that families need in their changing situation, and to vigorously represent family stresses, concerns, and points of view to planners and policy makers; and a common mission to improve levels of living and family life.

EVOLVING PHILOSOPHY AND CONTENT OF HOME ECONOMICS

Prof. Beatrice Paolucci
Department of Family Ecology
Michigan State University
East Lansing, Michigan

Home economics as a field of study and as a profession is concerned with improving the everyday life of humans. Its focus is on the interdependencies and interrelationships among the phenomena and processes in the physical and social cultural environments that impinge on human development. Its approach is ecological—a continuous search for the harmonious adaptation of the mutually sustaining relationships that couple humans with their environments.

Because a single profession can bring knowledge to bear and impact choice and action on only a limited part of the ecosystem, home economists generally define their sphere of concern as the household (family) and that part of the immediate environment (house, neighborhood, community) that impinges directly upon household (family) members and is subject to management by them.

Underlying the home economics profession is the belief that the everyday life of humans can be improved and/or enhanced through the *practical application of science* to the problems and opportunities which are encountered at the household (family) level. The understanding

and knowledge necessary for creating *particular* ways and expressions of living within the household (family) ecosystem is emerging from the little-understood art of the past into a more clearly defined, systematic practical science which aims at choice and action at the every day level. The practical sciences are pragmatic. They are pursued with a view toward achieving some excellence, or overcoming some defect, or making some improvement.

Knowledge in home economics can be efficiently and effectively structured around problems that occur at the point of transaction between household members and their environments. Identification of the "content" of home economics begins with the recognition of the relevant problem and then moves to identifying the essential concepts that lead to the solution of the problem. Fundamental to identification of household (family) problems is the analysis of household structure and function at a particular point in time and place. Emphasis would be on the development of processes for assisting households (families) to decide upon essential needs and values, translate these into feasible goals, calculate resources necessary to achieve these goals, decide upon a procedure for carrying the goal to action.

The focus on the household (family) ecosystem involves developing research and education programs which demand an analysis of the everyday operations of a household (family) and the development of alternative ways to improve living conditions and maintain viable environments. It proceeds by considering how the processes of managing (deciding and acting) are utilized in attaining essential values while meeting the essential needs of the household (family): food, clothing, shelter, nurturance, affection and socialization.

THE CHALLENGE TO HOME ECONOMICS
As a Force for Change in the Community, Nation, and World

Dr. Aurora G. Corpuz
Dean
College of Home Economics
University of the Philippines
Philippines

The Congress' concern for "Life, not just Survival," is sustained in a straightforward manner in the preceding plenary sessions. Life is not a genuine alternative to mere survival unless we are concerned with its human quality.

This morning we think and talk about change. We know some of the dimensions of this change. It is common talk that the world has shrunk into a "global village"; perhaps we should also realize that this shrinking of the world has been accompanied by an expansion of the individual person's world. We are more and more conscious of the human community.

As a force for change, home economics need not represent a movement for the complete transformation of everything. We ought to visualize home economics as discharging the necessary role of strengthening or reinforcing what we are accepting as permanent values, while simultaneously supporting change in favor of new values. It should be clear that if home economics is to be a force in a time and in a world of change, it is inconceivable that it will itself remain intact and unchanged.

The discussions in the preceding sessions of this Congress directed our attention to new areas of human concern that have not been central to home economics as a discipline and as a profession. Among these are population and demography, energy, pollution and ecology.

If home economics is to be a medium through which we might respond to these new concerns, we must accommodate or reflect them in our studies, teaching, and professional practice. Actually, these new concerns derive from, or imply, the strong contemporary orientation towards an old-concern—humanism. This concern for humanism is favorable for home economics. The home is the cradle of humanism, for it is here that are first developed the roots of human sentiment and feeling: compassion and benevolence, and then the bases of social order and notions of justice and community. If this simple proposition is accepted, it will follow that home economics must be deliberately oriented now and into the future to the home and the quality of life in the family.

We must, therefore, begin by reviewing the operations of an average school or college of home economics. This school would usually have three programs: instruction, research and extension or community service work. Moreover, it would have basic departments, say food and nutrition; clothing; child development and family life; and home economics education. A review might be made of the operations of the school through its three programs and in its departments, to identify those which most directly relate to the home and family life.

I suggest that the subject of the physical, intellectual, and social development of the child, the field of family life, food and diet, food preparation and the delivery of nutritional

services to poor families be the core of home economics, to the end that every student in the school be required to take them, and home economists continually increase our knowledge of them, and just as consistently broaden the range of applications of this knowledge to community life and national policy. The value to be served by this, is the strengthening or solidarity of the family.

While there is a distinct and recognized home economics discipline or profession, we teach or practice it in different environments. The values we hold may therefore vary, or our immediate concerns may differ in different societies and an important area of difference is in the value placed on family solidarity.

I now come to the question of the challenge of our discipline as a force for change. I have referred to the differences in the cultural and national environments within which we work, which will preclude a common answer. We can only inform each other about our respective answers, hopefully during this Congress, but just as properly afterwards. It is also necessary to consider home economics as a force for the change(s) we want to effect. While we can romanticize our goals, we must always be realistic about our resources. Obviously, home economics cannot do this alone. We can only make contributions, perhaps minor, along with the contributions of other disciplines, institutions, and governments in this direction. The problem is still a complex one, and would require the pooling of efforts with other participant agencies or organizations.

We cannot be very effective if we operate independently, although we must always explore the many opportunities where home economics might take initiative actions. We will find ourselves more and more called upon to participate in inter-disciplinary programs in the universities, and in interagency activities in the community or nation.

In closing, let me admit that I have only raised issues for consideration, and not advanced easy answers relative to my assigned topic. However, I venture to say that as with our shared concern for the human quality of life, we believe that this is not an academic or philosophical or ideological problem, for to us improving the quality of life means nothing except improvement in the lives of actual, not imaginary, human beings in real families and homes.

HUMAN VALUES AND NATURE'S ORDER: ARE THEY ON A COLLISION COURSE?

Louis Leprince Ringuet
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Since the end of the War, all Western countries, in America and Europe, countries in the Soviet sphere and Japan have been engaged in intensive development of scientific activity. Technology has followed suit. Such advances can be used for good or ill. A drug can effect a cure or cause death, depending on the dose. A very deep-rooted change may be seen to have taken place in Western countries as regards women's liberation: there is an extraordinary difference when one compares the lot of our French grandmothers with that of our daughters. Our grandmothers were enslaved by household tasks: they had to collect wood, keep the fire going for cooking and washing and to keep the house warm. They may have had to go to the well for water. It was daily slavery, although it did not prevent some of them from being happy. Nowadays a young housewife can look after her family by making use of refrigerating techniques, with deep-frozen food and refrigerators, operating on gas or electricity which require only a switch; even clothes and dishes can be washed by pressing a button, leaving programmed operations to take place without fuss. One of my daughters, who has five children of all ages, can look after her home and do all the housework, as well as having a part-time job which frees her.

In my opinion it is scientists and technologists who have brought about the great change in women's condition and their at least partial liberation, rather than feminist pressure groups.

In many developing regions, however, women are still forced to perform tiring, repetitive tasks. In many places throughout the world, women have to fetch water from several kilometers away. In such cases there can be no freedom: there is no chance of educating oneself, of having an opinion about world events. Any development must clearly be aimed at offering equal opportunity of liberation, as far as this is possible.

There will be return to former times. They are often seen as the good old days, but this is a totally false picture. People were subject to famine, disease, the hard tasks of winter and summer, which also formed people's character. Many died in epidemics of plague or cholera; children died, to such an extent that it is still a tradition in certain underdeveloped countries

that one has to have six children, to ensure that one boy will reach the age of twenty. The world must not continue to develop in a way that offers the rich more and more amenities, while making the poor ever-increasingly dependent on them. It is gradually being discovered that the world is a single whole. It can be seen clearly from photographs taken from satellites, but advances in telecommunications also make us aware of it. Everything that happens at one end of the earth reacts on the other end. There is an increasing interconnection among all the planet's inhabitants, the overdeveloped and the underdeveloped. In future years we must not think of quantitative growth in industrialized countries, but of a growth in quality, which will enable these countries to show greater solidarity with those still awaiting development.

It is consequently vital—and the responsibility lies mainly with women, mothers, teachers—to give young people a sense of international solidarity in their early infancy. If our children could acquire a responsible, transactional mentality, confirming this solidarity through the tremendous power of television, radio, records, books, this would be a considerable step towards improving relations among men, and particularly towards a more balanced liberation of women. Women have a leading part to play in this movement. If they are persuaded of it, we must trust to their ardour and tenacity to perform this role, and provide one of the best factors in a greater sense of brotherhood among men.

FOOD PRODUCTION AND HUMAN NEEDS— A CRITICAL BALANCING ACT

Georg Borgstrom
Professor of Food Science
and Human Nutrition
Michigan State University
East Lansing, Michigan

The seventies have seen a series of crises erupting on the world scene: population, food, energy, economy and water. These phenomena are not one-time happenings, but the results of long-term developments accelerating their course, and where the time span is continually shrinking. The supreme test the world is currently facing is not the hypothetical future billions but *the needs of those now living on Earth,* and of the one billion more which will be aboard our spaceship by the year 1986, of whom 85 percent will belong to the poor, hungry world.

In the overall perspective, the last twenty-five years is characterized by impressive achievements in agriculture, fisheries and technology. But, by and large, the masterful feats have been tactical. An overall strategy has been lacking, and we have been alienating ourselves from the stark realities of the globe. Mankind is lagging critically behind in food, education, housing, water provision, sewage facilities, etc. On almost all counts, we provide adequately for merely one-third of the present human family. Nonetheless, we seriously believe that we are going to perform the miracle of producing, in the brief span of some 25 years, twice as much food, water, energy, forest and mineral products than have been previously attained in all of man's history. Yet, even after such a herculean accomplishment, we would, due to the population growth, still be faced with the same unacceptable high proportion of starving, underfed and malnourished. The Hunger Gap can only be removed by a trebling of the current food production by year 2000, or a drastic realignment of the animal production of the affluent world.

Each year we place our hopes in the next harvest, hoping it will be good, but even if this is the case, this will not change the untenable situation that in this, the glorious Twentieth Century, the entire world is almost entirely dependent on the weather, has only a food buffer of 25-30 days, and, in effect, is only one or possibly two years from a universal food shortage.

Furthermore, we continue to mobilize the world's resources primarily for the benefit of the well-to-do. One-third of mankind consumes more than two-thirds of the yield of agriculture and the oceans. World trade shows the imbalance. Since the 1950's, a protein empire has been created, based on the prevailing trade pattern, with Europe and Japan as chief beneficiaries—each receiving far more than China and India together. Annually Europe buys more plant protein for feed (grain, oilseeds, and oilseed cakes) than either Africa or India consumes as human food. The Soviet Union gained entrance into the luxury enclave in 1972 when it became the recipient of the largest delivery of food and feed ever in world history. Although some grain was shipped to the poor countries, the protein exchange between the hungry world and the satisfied world is in negative balance both as to quantity and quality.

The multimillion armies of destitute—homeless, penniless, jobless, landless—are critically short of food with poor health ensuing, and constitute a huge world with little hope. All those outside the market economy constitute ghosts in the closet, causing havoc in many regards. But as a rule they have no voice. Their number is growing dangerously while

advanced technology is paving the way for development geared chiefly to making man superfluous. This explains why so much alleged "development" does little in removing unemployment. Also, we continue in the food field to base our programs on "effective demand," not recognizing true requirements. Far too many nutritionists are engaged in a foolish trimming of the minimal nutritive limits downward when, in effect, more attention should be given to filling optimum needs required for safeguarding health and sustaining productive work. We should stop asking how close we are to limits—and rather start asking how many hundreds of millions have already passed the limit and have been or are being pushed out into the wilderness.

Mankind is facing a situation truly unprecedented in history by adding more than one billion people in the next ten years, equivalent to a new Europe each sixth year, or, in less than three years as many as now live in the United States. Asia is adding a new Japan every second year. Brazil is presently increasing with more people per year than the Soviet Union, and Mexico with more than the United States. So is Nigeria with 80 million. Africa will surpass Europe by 275 million in the year 2000. The ongoing organization will, within ten years time, thoroughly reshape the very fabric of today's society and add to food costs exorbitant distribution burdens. The huge irrigation dams, some serving millions of acres, rarely come close to providing food for more than a few years' growth of population. In man's long quest for food, more than half of the globe's forest acreage was lost, causing grave disturbances in the water and temperature balance over major areas. In this, the Irrigation Century, we have created five times more deserts through ecological abuse. In key countries 60% of the irrigated land is reportedly threatened by salt accumulation.

The key elements of a new global strategy must include the following: world-wide drastic measures must be taken immediately to slow down the population increase. The urbanization drive must be brought under control. Less than one-third of mankind can no longer be allowed to consume two-thirds to three-fourths of what world agriculture and fisheries yield. World trade with food and feed must be revamped according to new models. Food crops must gradually replace feed crops. Animal production must be tied to a system of waste recycling. Large scale efforts must be initiated to control the losses and spoilage both before and after harvest, and to achieve a more rational utilization of especially milk, fish, oilseed and legume proteins. Rational contingency storage of staple foods for emergency situations needs to be organized. Less capital- and energy-demanding techniques in agriculture, fisheries, food processing and distribution must be introduced. Capital outtakes from the bank of Nature's resources in soils, water, forest, and minerals must be accounted for.

In analyzing limits and how close we are, there are four equally neuralgic points: (1) food utilization, (2) nutrition, (3) diseases, and (4) resources. They are all essential in formulating a food strategy operation within the given limits of mankind, designated by me the Hexagon of Survival. Ecology and Economy are the main balancing wheels. If all tilled land were used for the raising of food crops and diets were accordingly adjusted, all people would receive sufficient food, but this overlooks the dynamics. Within ten years there are one billion more which have to be measured against land, water, energy and fertilizers—in all areas of which serious limitations already prevail. A new strategy is called for.

THE POPULATION FACTOR

Mrs. Mashin Saad
Secretary-General
Sudan Family Planning Assn., IPPF
Khartoum (Sudan)

1. General demographic situation: Population of world is estimated to be in 1975 about 4 billion. The problem of population growth differs in various countries. Also the problem is reflected in distribution world-wide and in particular countries with regard to age distribution.
2. Problems of population growth are reflected in developing countries as a hazard to socio-economic development, lay a burden on limited resources which have to be channelled to meet essential services such as education, health, etc. There are also problems of depletion of food resources and underemployment. Environmental problems face both developed and developing.
3. Family planning: An approach to help with regard to the population problem has been family planning. Family planning started as a voluntary movement propagating use of contraceptives.

   Now it is recognized as a human right with many Governments all over the World either giving family planning services or supporting such programmes.

   In 1975 there are 120 voluntary family planning associations and 74 officially established Government Programmes.

New trends in family planning have led to family planning in its wider context. Family planning volunteers have initiated legal reform for better status of women and motivated various categories of trained and professional personnel to be involved in delivery of services.

Sex education and family life education are considered very important and various approaches have been suggested.

4. Teenage pregnancies: The problem is either due to misconception about use of contraceptives amongst certain socio-economic groups in developed countries or due to cultures which advocate early marriage, e.g., some Muslim communities in Asia and this prevails with regard to many developing nations. Risks for mother and child are high. Situation needs a flexible approach. In developing countries the situation might change with changing attitudes in moral and ethical values, with more changes in education and legal reform to better the status of women.

   In developed countries part of the solution would be to widen the scope of information on family life education, family planning, etc.

5. The role of Home Economists: Home economists are nearest to the family and can be agents in bringing an awareness of the population problems and advocates for better planned families everywhere.

INTEGRATED RURAL DEVELOPMENT AND THE FAMILY

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Among the critical issues facing the world today are those related to impending world food shortages, the imbalance of food supplies and population, and the continuing hunger and malnutrition among the people in the developing regions. A large majority of these people live and work in rural areas and depend on agriculture, fishing and forestry for a livelihood. It can also be said that they are among the poorest people on earth, comprising over 80 percent of the estimated 750 millions poor of the developing world. This widespread rural poverty is one of the greatest obstacles to rural development which therefore by-passes millions of rural families, mostly the small-scale farmers, tenants and landless labourers.

It is well recognized by FAO along with the other specialized agencies, the World Bank and other international bodies that in previous development strategies there was a one-sided emphasis on economic growth and technical agricultural development whereas concerns for the rural family were often strictly of a welfare nature. This served to further aggravate the condition of the rural poor families and did little to bring them into the mainstream of developmenat.

Recent integrated rural development approaches, conceived as a means of planning and executing changes in a rural system, not only seek to synchronize aspects of agricultural development and generate productive employment through non-agricultural development, but also aim to prepare rural families for active participation. On the other hand, any effort toward rural social development is more likely to benefit rural families in a context of vigorous growth of agriculture. The implications are that an effective rural development strategy is dependent upon proper timing, organization, national political commitment and most important of all, involvement of rural people at the local level.

The primary cultural unit in rural areas and a basic unit of production and consumption in subsistence agriculture, is the household or extended family group, which represents an important linkage with broader social and economic factors in the rural development process. Thus the potential for rural transformation begins in the family unit, where attitudes and patterns of behavior are formed, and where many important decisions are made which contribute to human development and human productivity.

It is well recognized that national resources need to be allocated at the local level for the benefit of families so they, in turn, can develop their potentialities to the fullest extent. A well organized family, one able to manage its farm, family and community resources for optimum productivity, is an asset to a nation's development.

Many professions, services and institutions serving the rural areas of developing countries are concerned with various aspects of the family, its advancement and its well-being. However, of the human service professions, home economics probably has the most fundamental contribution to make to rural families as new opportunities of growth and development become available to them. Home economists also serve as advocates representing the

needs and interests of rural families when national plans and policies, having an impact on rural families, are formulated.

Further to this, as indicated in a recent FAO Expert Consultation: "home economics becomes a liberating force releasing female family members for other economically productive activities as well as for contributions to development planning and work related to farm, community, and nation." Thus a forward-looking, modern, adaptable home economics rural programme also has a unique contribution to make to the effective integration of women in development as well as to the achievement of the overall goals of human and rural development.

HUMAN SETTLEMENTS OF THE FUTURE

Professor Dr. W. Landzettle
Technische Hochschule
Hanover, Germany

It is not possible to provide a complete answer concerning the way in which man will live in the future. The level of civilization and the way of life of mankind differs so much. The protective function assured by the habitation is, however, an essential factor in all cultures, but the effects of movement and change are more psychological than physical.

The dwelling should be considered from the ideal of the desired home and not just the essential as an abode. In considering whether the influence on man of the visible image of his surroundings is significant, one realizes that this contributes in all ways to the well-being of the individual.

The tendency to evolve towards concentrated and close living is against nature. The want of foresight, the similarity, the uniformity, the non-consideration of the past has led to a suppression of nature and to a dehumanizing of dwellings and surroundings. This "dehumanizing" is affected when man, an integral part of nature, loses his true contact with that nature and so his true character. If we agree with this reasoning, the industrialized nations would do well to consider how much of man's true relations have been rendered impossible in the course of progress.

The developing countries would do well to consider the inconveniences suffered by the human race in that progress. This examination could be made by considering these tendencies contrary to the prevailing tendencies.

Some allusions to the proposal:

1. There must be certain basic standardization and uniformity in the ordering of the environment provided by a network of planned structure. At certain points variations should come into effect. There should be allowance always for an opening out of the planning allowing for as much variety and freedom as possible.

2. Man would be able to grasp his identity with the dwelling and surroundings by participating.

3. As large a number of planners as possible should be involved to prevent the construction of the environment being in the hands of a few. This would not exclude the utilization of the essential support emanating from the industrial producers.

4. The integration of nature in the apartment and the large home is unquestioned. In both there should be a relationship established with the sun, trees and climate.

5. Each individual should be enabled to live relatively without tension in a world of strong demands and so should be able to choose freely according to his needs the polarity of his participation.

a) In a withdrawal from society

b) A participation in society.

Any attempt to equalize the needs of individuals does not take into account the dynamism of a society formed of individuals.

6. The dwelling and the surroundings cannot be perfect but should allow for freedom of change and of adaptation, taking into account changes which occur and enabling identification by participation in the environment and the dwelling place.

The habitation is the most important thing in man's life. All living emanates from it and is centered around it.

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M. S. Stewart; R. Toadvine; C. Heide
Mobile Homes Manufacturers Association, 1974
80 pp., $2.00

The authors have developed a revised teaching unit on mobile homes for use in consumer and homemaking education programs and for Cooperative Extension audiences. The format of the unit is ideal for classroom use although it could be readily adapted to non-classroom teaching situations. This resource consists of six teaching units including: Mobile Living in a Contemporary Society, Housing Decisions to Meet Changing Needs, Financial Aspects of Owning a Mobile Home, Choosing a Location for the Mobile Home, Obtaining Maximum Benefits from the Mobile Home, Consumer Concerns in Relation to Mobile Home Living. Each unit includes behavioral objectives, concepts and generalizations with supporting content, resource ideas, and suggestions for evaluation. In addition, the authors have included a bibliography and several ideas for transparencies, bulletin boards, check lists and a mobile home game. A pamphlet describing other teaching resources is also available from:

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MOBILE HOME FOR MODERNS

Second Edition
Consumer and Home Making Education
M. S. Stewart; R. Toadvine; C. Heide
Mobile Homes Manufacturers Association, 1974
80 pp., $2.00

The authors have developed a revised teaching unit on mobile homes for use in consumer and homemaking education programs and for Cooperative Extension audiences. The format of the unit is ideal for classroom use although it could be readily adapted to non-classroom teaching situations. This resource consists of six teaching units including: Mobile Living in a Contemporary Society, Housing Decisions to Meet Changing Needs, Financial Aspects of Owning a Mobile Home, Choosing a Location for the Mobile Home, Obtaining Maximum Benefits from the Mobile Home, Consumer Concerns in Relation to Mobile Home Living. Each unit includes behavioral objectives, concepts and generalizations with supporting content, resource ideas, and suggestions for evaluation. In addition, the authors have included a bibliography and several ideas for transparencies, bulletin boards, check lists and a mobile home game. A pamphlet describing other teaching resources is also available from:

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November/December 1976

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A publication of the Division of Home Economics Education,
Department of Vocational and Technical Education,
College of Education, University of Illinois,
Urbana, Illinois 61801

Vol. XX, No. 2, November/December 1976. Published five times each academic year. Subscriptions $7.50 per year, $21 for three years; Canada, $8.50 per year, $24 for three years; Foreign, $10 per year, $27 for three years. Single copies $1.75. Special $5 per year ($7 foreign) for undergraduate and graduate students when ordered by teacher educator on forms available from ILLINOIS TEACHER office.

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Foreword

Futurism means, among other things, looking ahead, seeking direction, using different approaches for new content and audiences. Futurism must proceed from a base, a foundation. The contents of this issue of the ILLINOIS TEACHER represent some of this foundation and some of these approaches.

The content of home economics is derived from research, but often the research is undertaken because of someone's experiences or observations. The Sundberg and Carlin research on low temperature meat cookery represents a response to concern for safety of meat cooked in the popular crockery pots. It is the kind of information which can be included in lessons on meat cookery, on appliances, or on food safety. In fact, it might also suggest experiments to be done with the science teachers.

Crull's housing consumption study represents research which suggests that standards from one income level to another are not as different as some people considered them to be. The author not only reports the study but she also explains the research process. Thus, the article serves to complement Fanslow's discussion on use of research in the classroom.

Different approaches, different content, or a combination of content and approach are the basis for the article on the Cooperative Urban Teacher Education program. Abbott, Schulz, and Gienger not only describe the program which prepares teachers for work in urban areas; they have included a series of lessons developed by a program participant. Lessons also are included among Thomas' and Plumb's ideas for exploring clothing occupations. Kohlmann and Ericksen present a rationale for middle school planning as well as suggestions for teachers. Beavers and Burris describe procedures for identifying needs, especially of the adult learner.

The home economics teacher's part in preparation for today's roles is the topic of two articles. Crase discusses preparing students for the parental role and Thomas and Halbrook, the importance of FHA/HERO in helping students assume their multiple roles.

Two additional articles from Iowa will be included in other issues of ILLINOIS TEACHER this year. One is Jerry McClelland's "Sex-Role Stereotyping and Work: Opportunities for the Home Economics Teacher," and the other is "Perspectives on the Family in the Year 2000," by C. L. Cole.

The current issue does not look at all aspects of future direction and content, but it includes several which are a part of the research and instructional programs in the College of Home Economics at Iowa State University.

I would like to express appreciation to the contributors, to Alyce Fanslow for help with the editing, and to the staff of the ILLINOIS TEACHER for inviting us to do this issue.

Ruth P. Hughes
Guest Editor for This Issue

EDITOR'S NOTE:

The *Illinois Teacher* is grateful to Ruth Hughes and colleagues at Iowa State University for their work in providing the varied content for this issue. We feel that our readers can benefit from the broader background offered when one issue each year is coordinated from another state. Our guest editor for next year will be from the Southeast. Watch for future announcement!

Also see inside back cover for Special *Illinois Teacher* offer!

A Cooperative Urban Teacher Education [CUTE] Program

James W. Abbott
Director, CUTE of Kansas
Wichita

Dorothea W. Gienger
Associate Professor
Home Economics Education
Iowa State University

Mary Ann Schulz
Home Economics Teacher
Maple Valley Community School
Mapleton, Iowa

In some of the largest cities in the United States, one out of every two public school children is culturally or educationally disadvantaged. The teachers who teach these children must know and understand them, but most teachers are not prepared to understand the problems of inner-city teaching. The Cooperative Urban Teacher Education Program is an approach to teacher education specifically designed to prepare superior teachers for the inner-city schools of America. The seventeen-week program provides students with the experience and knowledge needed to face practically any classroom situation with confidence, grades kindergarten through twelve.

THE BEGINNING

In the fall of 1967, a group of private liberal arts colleges, the Mid-continent Regional Educational Laboratory in cooperation with the Kansas City, Missouri, and Kansas City, Kansas school systems began a program designed to acquaint teaching candidates with urban schools. The program was financed originally by a planning grant from the National NDEA Institute for Advanced Study in Teaching Disadvantaged Youth and a grant from the Danforth Foundation.

During the second semester of the 1968-69 school year, a Cooperative Urban Teacher Education Program was initiated in Wichita, Kansas, by eleven liberal arts colleges in Kansas in cooperation with the Wichita Public Schools and the Catholic Diocese of Wichita, and Kansas State University, Manhattan, joined the Kansas program in the fall of 1969.

IOWA STATE UNIVERSITY INVOLVEMENT

In the fall of 1969 the Home Economics Education Department at Iowa State University became the first out-of-state university involved in the Wichita program. In order to participate in the exciting and challenging experience, home economics students were urged to plan a degree program strong in child development, nutrition and clothing skills. The occupational courses gave added strength for those who could incorporate this aspect of home economics. Sixty-one home economics majors have completed the program and have spoken so highly of this preparation for teaching that it inspired majors in other areas to want to become involved. During the first three years, students majoring in mathematics, social sciences, biology, chemistry, psychology, elementary education, child development, applied art and physical education enrolled. In addition to the 61 home economics education majors, 56 in other curricula completed work in the CUTE Program which has opened up to them many challenging opportunities.

AN EXPERIENCE PROGRAM

Students in CUTE are involved with experiences in sociology, mental health, and techniques of teaching the inner-city youth. A professional or practicing psychologist helps the student teacher understand his/her own attitudes, anxieties and prejudices. Learning about the social and cultural customs of minority groups and how they influence pupils is guided by a sociologist. The student teacher also becomes knowledgeable and competent in the newest instructional skills. All of these experiences are directed in a seminar session from six to eight hours daily or in a school field environment in the city of Wichita.

As a participant in the CUTE Program, visits are made to community agencies such as the juvenile court, the welfare department and the police station. Conferences are held with personnel in public and private agencies concerned with the problems of an urban society as well as with parents and pupils, some of whom are welfare recipients. Services available through the school system and neighborhood agencies are investigated. A student teacher learns where to get help for a troubled student and is required to become familiar with the neighborhood immediately surrounding the school in which s/he will be student teaching. CUTE enrollees attend an inner-city church to observe where the pupils worship. They volunteer a day's work in an inner-city business and compare prices in grocery stores to determine whether the poor pay more. When the interns begin their student teaching experience, they have gained a better understanding of the services and problems surrounding their school.

After eight weeks of preparation, they begin full-time student teaching. Cooperating teachers are selected on the basis of experiences and special qualifications in their teaching field. A CUTE staff member observes the teaching of each enrollee during the student teaching assignment and holds evening sessions to discuss the experiences of teaching. In addition, staff members are available for consultation as needed.

Iowa State University students participating in the program receive additional support and supervision from the staff member who coordinates the CUTE program at the University. Conferences with individual students and group discussions with former enrollees help to orient the ISU students for the off-campus internship in Wichita.

The ISU coordinator makes at least two visits during the time that the ISU students are in the program, one to observe the individual in the group seminar setting and a second to supervise the student teacher in the classroom and to consult with the cooperating teachers, the directors of the program and the administrators in the public schools.

EVERY CHILD HAS WORTH

All of the experiences are designed to get the interns to recognize their own self-worth and the worth of every child. The tutoring, home visitations and eighth floor juvenile jail encounters all reinforce the need for the "special" teacher who genuinely cares for every individual child and human being. The seminar role playing situations involving the handling of a discipline problem or a troubled child all reinforce the need for teachers to help develop humanness in students.

A LIVE-IN PROGRAM

Each semester a new group of students enter the Wichita CUTE Program. All live together in a special dormitory on the campus so they may share experiences, personal and professional. Hiring officials from some fifteen inner-city school systems interview the teachers during the semester. All of the sixty-one ISU students who completed the CUTE Program were offered one or more teaching positions. Only a few declined. There is a demand for teachers who are prepared to work with students in low income urban areas. The placement record is 99% for Home Economics Education Iowa State University graduates from the CUTE Program.

OBJECTIVES OF THE CUTE PROGRAM

Experiences and activities are designed to help the CUTE interns:

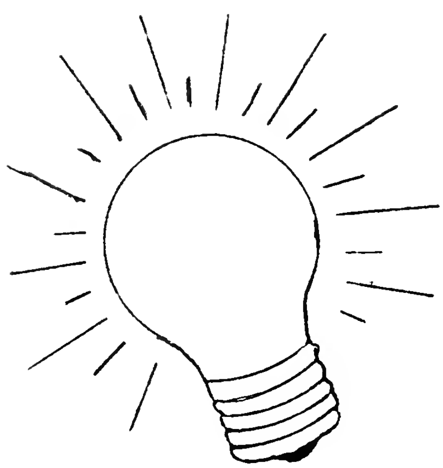
- look at themselves, their own hopes, fears, and biases;
- learn about other cultures, look for similarities and differences, and develop understanding and appreciation of other cultures;
- learn how to live with and relate to individuals different from themselves;
- learn how to work with urban faculty, parents, administration, and community personnel;
- learn the process of child growth and development;

- become familiar with an urban school district and programs available within the district;
- acquire modern and proven techniques of teaching, planning, and disciplining which will develop the pupil's self-concept into a positive one and will provide him/her with needed and relevant learning experiences;
- work daily for an eight and one-half week period with an experienced cooperating teacher to direct the learning experience of a group of students.

IN-SERVICE OPPORTUNITIES

Closely allied to the Cooperative Urban Teacher Education Program of Wichita are the Human Awareness Institutes held annually since 1973 as a part of summer school at Iowa State University. These institutes are particularly designed for those who work with deprived individuals, minority groups, hard-to-understand people and individuals that need an "understanding you."

Mary Ann Schulz, a participant in the 1975 Institute, used as a basis for a project the first objective of the CUTE program, "to become more aware of your hopes, fears and biases." Students in teacher education programs have often expressed their fears of working with individuals who are different from themselves and of working in the inner cities of America. The short unit on FEARS which follows may help them cope with their own fears and may inspire them to help their students recognize and overcome fears which may hamper learning and the ability to develop to one's fullest potential.



ideas that worked!

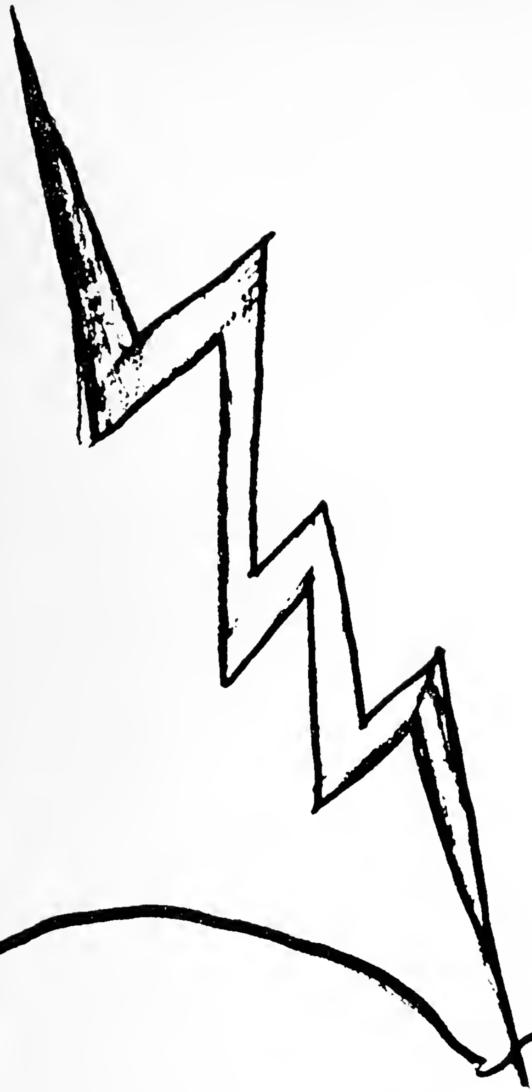
Illinois Teacher would still like to hear from teachers with ideas to share in future issues. Send us a one-page description (with photo if you have one) of a teaching idea that worked for you, or a discipline situation that you handled well, or an idea that improved your files, your classroom organization, or your bulletin boards and display areas.

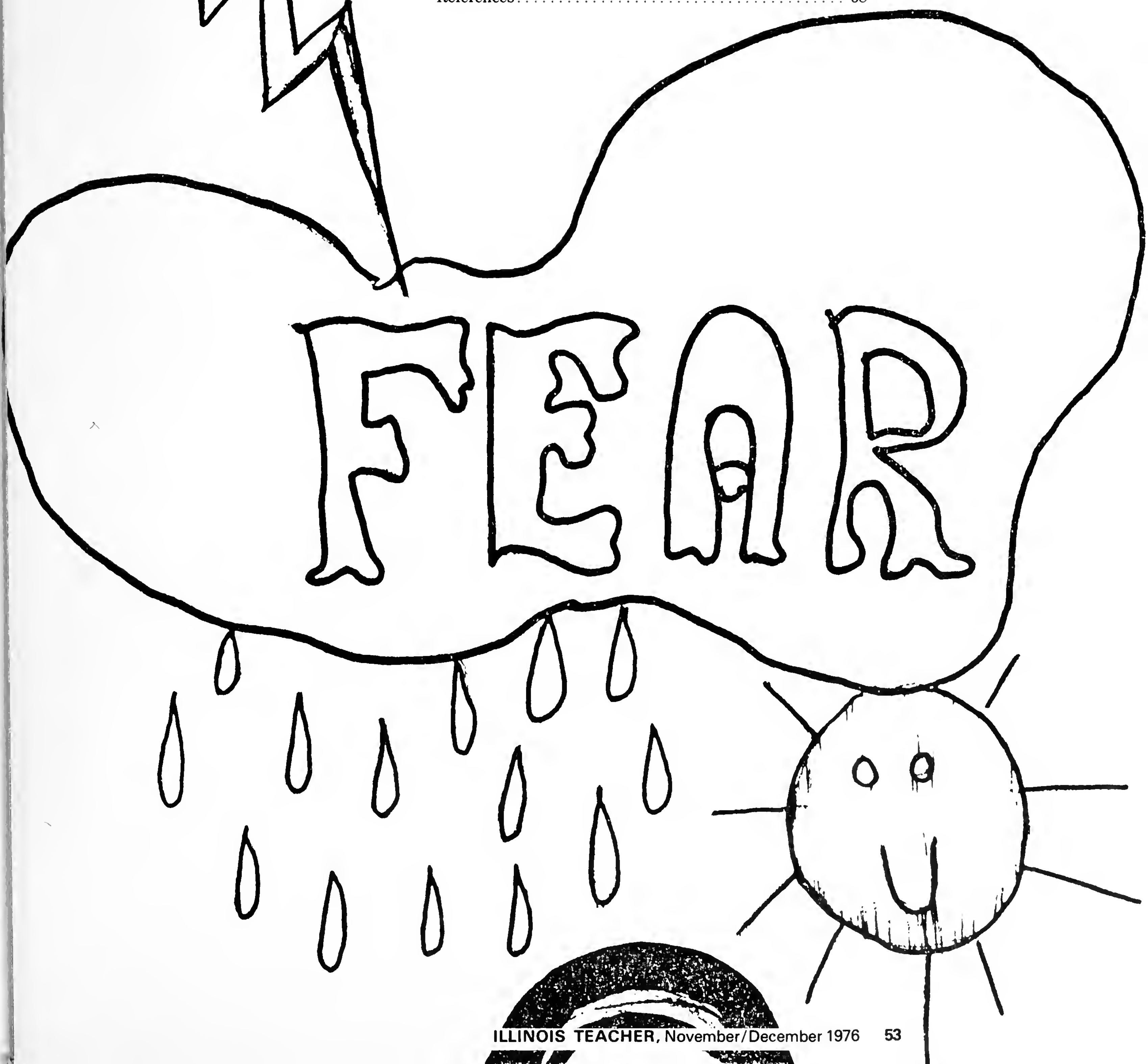
Let us hear from you!

FEAR—
FRIEND or FOE?

MARY ANN SCHULZ

Page





Behaviorial Objectives

1. Recognize that all people of all ages have fears.
2. Recognize that fear can be both a friend and an enemy.
3. Comprehend the influence fears might have on the decision making process.
4. Recognize that fears might curb development of an individual's personality or academic potential.
5. Analyze the weaknesses and strengths of one's own fears and recognize ways in which to combat them.

Generalizations

1. Fear is a basic human emotion.
2. We learn of fears and how to live with them from our earliest years.
3. Fear can confuse our thinking and keep us from acting sensibly, or it may make us more alert and cautious.
4. Fears are not in-born but are learned from other people or from our experiences.
5. Many fears are learned through "conditioning."
6. Emotions such as fear strongly influence our motives.
7. We often respond to fear by withdrawing.
8. Fear can be divided into three separate categories: (1) natural fear, (2) instilled fears, and (3) anxieties.
9. Having a job to perform in a crisis helps us to control fear.
10. Connecting the feared object with something pleasant may help to combat the fear.
11. Fears can be based on reality or might be based on imagination.
12. Some fears can be overcome by analyzing and understanding how they arose.

ESTABLISHING SET

Activity I

A. Ask class members to think silently for a few moments about a FERRIS WHEEL. Do not discuss the topic as yet.
B. Ask the students to describe the invisible TORNADO I have in my hand. As the description draws to a close, discuss feelings experienced or observed during a weather watch or a weather warning. Some students may have had experiences in actual storms that they would share. The word *fear* is sure to enter into the discussions establishing the topic.
C. Return now to thoughts about FERRIS WHEELS. Some students will express joy and excitement when discussing ferris wheels while others may express fear of heights or fear of quality of construction. Compare their feelings about them today as opposed to when they were a child. This will help to establish the fact that we do not all have the same fears and that fears may change with experiences.
D. Allow students ten minutes to search for picture examples of fears in magazines. These will then be used to construct a large collage for the bulletin board.

FEAR: *an emotion or feeling of alarm, dread or disquiet caused by an awareness or expectation of danger; it is divided into natural fears, instilled fears, and anxieties.*

FEAR DIARY

Activity II

A. Pass out student "texts" entitled *How To Conquer Fear Without Trying.* Tell students not to open the booklet until they are told to do so.
B. As students open the books they will find that the pages are blank with the word IMPOSSIBLE on the last page. Ask students to discuss the gimmick. Perhaps the students will note that it is human nature to look for easy answers to our problems.
C. Use the blank pages of the gimmick booklet for the class assignment called FEAR DIARY. The FEAR DIARY is a daily log of fears felt, heard, or observed. The purpose is to increase awareness of fears which are expressed and to observe how individuals handled these fears. Observations of fears and reactions to the fears will be analyzed in class discussion near the close of the unit.
D. On the last private page of the booklet make a list of the items "I FEAR . . . ."

"Anxiety nests deeply in the heart,
Working her sorrow in secret;
Restlessly she cradles herself, disturbing
joy and peace, with new masks veiling her face,
or else appearing as house and property,
as wife and child as fire, water poison daggar.
You worry about so many things which may not happen
And weep for things you may never lose."
—Johann W. von Goethe

There are many Kinds of fears

Activity III

A. Use a cartoon dealing with fear to introduce the topic "There are many types of fears."
B. Hand out a list of fears given below. Have students add other fears they have felt or observed to the list.
   Cold
   Fire
   Death
   Darkness
   Thunder and lightning
   Strangers who offer candy
   Fear of dogs

Bogeyman
People of other races
Old age
Meeting people
Making the honor roll but feeling miserable because of fear that someone will discover s/he cheated
Accidents
Being enclosed (perhaps because of being put in a dark closet as a child)
"Step on a crack, you break your mother's back"
Constant hand washing
Having to speak before a group
Authority (can cause mental illness)
Elevators

C. Divide students into small buzz groups to analyze whether the fears on the list are examples of (1) natural fears, (2) instilled fears, or (3) anxieties.

"In time we hate that which we often fear"—Shakespeare

"No one loves the man whom he fears"—Aristotle

Fears can be helpful

Activity IV

A. Pass out five pieces of wrapped nuts to each class member.
B. Have class divide into groups of five and sit in a circle with knees touching.
C. Without use of speech have group members give each other their nuts until time allotment is up.
D. For a same amount of time take nuts from the members of your group without talking. Allow students to keep the nuts they have when the time period has ended.
E. Discuss feelings which occurred during the exchanges. Did any one fear the loss of nuts or experience any other fears during the activity? Did anyone fear touching any of the other members of the group?
F. Continue the discussion by citing examples of how fears can be helpful. Discuss the dangers involved in being completely free from fear.

"Early and provident fear is the mother of safety"—Burke

LEARNING FEAR

Activity V

The following paragraph from Elizabeth Hall's book *Why We Do What We Do* illustrates how fears are learned.

> "When we are afraid, we expect something unpleasant to happen: we expect to be hurt, to be alone, to fail a test. And it is easy for us to learn fear. More than fifty years ago, J. B. Watson, one of the early American psychologists, taught a little boy to fear anything that was white and fuzzy. Watson showed Albert, who was nine months old, a tame white rat. Albert was not afraid and seemed curious about the rat. Then, whenever Watson showed Albert the rat, someone made a loud noise just behind Albert's head. The noise frightened Albert and made him cry. Soon Albert cried everytime he saw the white rat—or even a white, fuzzy stuffed toy. The feeling of fear is extremely unpleasant. Anything that will reduce that feeling or make it go away becomes a goal. Albert avoided the white rat because the rat became the signal that he would hear a loud, unpleasant and frightening noise."

A. Discuss Watson's experiment.
B. List examples of fears which might have been acquired by a similar manner.
C. Explore individually or in groups other pieces of research which have been conducted on fears and conditioned learning.

FEAR THE FOE

Activity VI

Select excerpts from Hamlin Garland's *Main-Travelled Roads* to show how fear can create emotional problems and sow the seeds for still greater problems.

A. Discuss the fears expressed.
B. What were some physical and mental reactions to expressed fears? Have you experienced physical reactions to fears?
C. What better methods could have been used to conquer fears? In letting fears get the best of you, what sacrifices may you have to make?

FIGHTING FEARS

Activity VII

A. In order to conquer fears one must be realistic about them. Each student should list privately his/her fears, if not already recorded in his/her "Fear Diary," and list ways in which conquering these fears could improve self as a person. Also list limitations in individual development which could occur when letting these fears govern us.
B. Select and read poems which may serve as inspiration for fighting fears. Students may have other poems or songs to add to the group.

"He who fears being conquered is sure of defeat"—Napoleon

FEAR NOT

Activity VIII

Movie: "You Pack Your Own Chute" available from Northwestern Mutual Life Insurance Agency

The movie can be used as a climax to the unit of study on fears. This well-portrayed movie shows very dramatically the fears that a woman psychologist faces when making her first parachute jump. The preparation for the "jump" illustrates fears and problems we face in everyday living.

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DEATH AS A PART OF LIVING

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In an Iowa State University course "The Individual and the Family," which deals with self awareness of the individual and the relationship with the family at various points in the life span, one of the topics is death and its effect on the individual and the family. Since students had asked about courses offering more depth in this area, faculty members were encouraged to offer a weekly seminar, "Death As A Part of Living," in which individual attitudes toward death were explored. Student response was enthusiastic during four such seminars, and it was suggested that a regular experimental course be offered. After the first semester, student interest forced an expansion beyond the one section offered.

Our experience is indicative of a nationwide trend towards a desire to bring into everyday awareness a topic which has been avoided or at best discussed with euphemisms.

DENIAL OF DEATH

Death is an experience we all face. It is neither a disease nor an enemy. It cannot be conquered. Death, an integral part of our life, is as much a part of human growth as is being born. It is not something we can deny, although we try—as our constant preoccupation with youth testifies.

The prevalent attitudes exhibited in the U.S. toward death have not always been that of denial. Death was a familiar scene in our homes prior to World War I. It was a natural event which occurred as part of the life cycle. The deceased loved one probably died in the home with all the family present and caring for him/her. Because the aged person was also often a part of this family system, aging and death did not appear to be so alien, but were instead a part of living.

With the expansion of medical knowledge, increased technology, extended life expectancy and the movement toward a mobile, nuclear family, the situation has changed. In many cases, it is seen as a defeat when a person dies. Something in our technology has failed. Today few people die in the home. Most are institutionalized and surrounded by impersonal specialists. Often other members of the family are not even present in the hospital room at the time of death.

What we do see of death results almost in immunization against death. Scenes vividly portraying highway fatalities are flashed on television screens and violent deaths of many kinds are described in detail by the media. Mass destruction from nuclear power seems an inevitability. These images we receive actually numb us psychologically to the idea of death. We feel that it always happens to someone else.

CHANGE IN ATTITUDES

We are beginning to change our attitudes toward death and dying. Elizabeth Kubler-Ross, a Chicago psychiatrist, has made immense contributions to our knowledge. More importantly she has helped lift the taboo from the discussion of death. Five stages of dying she identifies can give us an awareness of what is taking place with a terminal patient: (1) denial, (2) anger, (3) bargaining, (4) depression, and (5) acceptance.[1] A terminal patient may not advance through all stages nor in that order, but each person can continue to grow psychologically until death. Studies of Ross and of Mwalimu Imara[2] have shown that dying can be a stage of new transformation and recommitment to living for terminal patients.

Even though the majority of people still die in hospitals rather than homes, improvements *are* taking place here. Hospices, designed to give the dying relief from the symptoms of their disease, the security of a caring environment, and needed support for the dying and

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[1]Elizabeth Kubler-Ross, *On Death and Dying* (New York: MacMillan Publishers, Inc., 1969).

[2]Mwalimu Imara, "Dying As the Last Stage of Growth," in *Death: The Final Stage of Growth,* ed. by E. Kubler (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1975), pp. 147-163.

their families are developing in this country and elsewhere.[3] They are striving to help people maintain a meaningful life until death.

COURSE DEVELOPMENT

Courses on death and dying at colleges and universities are increasing. Secondary schools are following suit. Correspondence received from secondary teachers in Iowa shows an increasing awareness of a need for courses on death education. Reasons for taking such a course range from the recent death of a loved one to curiosity about the subject. Some students have had considerable experience with grief; some have never been to a funeral. College students who were asked why they took the course on death responded:

> "There are many of the ritual ceremonies concerned with disposal of a body I have questioned. I've donated my body to science but am still not satisfied with the predominant refusal of persons to talk about death and dying."
>
> "In my family, death is going to be a reality sooner than I'd like to think about—but I have to."
>
> "I thought this course sounded interesting. I haven't dealt with death very much."
>
> "I'm taking this course in order that it may help me to cope with death."
>
> "I am afraid of death because I'm not sure what it really is. I hope by taking this course I'll understand more about death."

High school students respond in much the same way. These answers indicate a need for courses on death education on the secondary level.

Many areas can be included in a course. Questionnaires could be used such as the one "You and Death" in *Psychology Today,* 1971, Vol. 5.[4] Students can devise their own, thus including areas of individual concern. These are excellent tools for discovering where the students are at that point in time. It is also useful to return this questionnaire at the end of the term to enable students to determine some of their own personal growth.

Societal attitudes towards death and each individual's resulting philosophy of life have been important areas in our course or seminars on death. Because personal awareness of ourselves and our attitudes is extremely important, it becomes a thread running through the entire course. This awareness also extends to the families of students where discussions are sometimes held that facilitate personal growth for all.

Differing cultural attitudes towards death enable students to gain perspective about our societal attitudes. A useful assignment in this area is to choose to read a novel that deals with death and to react to its contents in both an oral and a written report.

Students are concerned with the life span of the individual and the family and how death affects each. Topics of current interest, such as those we read about in the newspapers and hear about via other media, have given students a chance to choose and explore particular areas of their individual concern. Included are funerals, burial rites and practices (including costs), suicide, grief, and explaining death to children.

Experiential exercises such as those described in *Tips and Topics,* May, 1976,[5] help students to get in touch with their own feelings. *A Manual of Death Education and Simple Burial* by Ernest Morgan[6] also includes experiential exercises. A useful exercise with which to begin class might be that of gathering students in small groups of 5 and 6 and sharing their first experiences with death. The question "How was the subject of death treated when you were growing up?" can facilitate discussion. An exercise that interested many students in our courses was that of planning their own funeral. Small groupings on these individuals' philosophies of life are interesting to students.[7]

It is important to keep classes small enough so trust and rapport can develop. Students need this supportive climate when they are exploring their own attitudes and feelings.

A field trip to a local funeral home, crematory, or cemetery is a very worthwhile experience especially if you are fortunate to have a funeral director or guide who encourages all

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[3]John Craven and Florence S. Wold, "Hospice Care for Dying Patients," *American Journal of Nursing,* 75(10) (1975), 1816-1822.

[4]"You and Death," *Psychology Today,* 5 (1971), 67-72.

[5]*Tips and Topics in Home Economics,* XII(4) (1976), 10. Texas Tech University, Lubbock, Texas.

[6]Ernest Morgan, *A Manual of Death Education* (Burnsville, N.C.: Celo Press, 1975).

[7]Joyce Mercier, *Discussing Death: A Guide for Group Discussion* (Ames, Iowa: Cooperative Extension Service, Iowa State University). Expected release date, January 1977.

questions and answers them openly. Suggestions for resource people include: clergy of local churches, physicians, nurses, medical social workers, lawyers, legislators interested in this area, citizens who have personal experiences to share. Students may have other suggestions.

Resources such as films, slide presentations, and filmstrips are often available from your extension service or from a local funeral home. Programs on educational or commercial television may be suitable.

Responses from students have been excellent. When asked on an evaluation form at the end of the quarter whether or not this particular experimental course should be continued, all replied in the affirmative.

Some typical student responses are:

> "I think this should become a regular course. It has helped me an awful lot in accepting and opening up about death. If it can happen for just one student per quarter, it's worth it."

> "I think this should be a regular class. I think it's something everyone should be aware of. Death is a very important thing to know about and be aware of. It's going to happen to all of us so why not understand it a little better?"

SUMMARY

Increasing interest in death education suggests that courses be taught on the secondary level. It is no longer a taboo subject to be denied, but one which gives us an awareness of how to live. We can help students to understand that death is a part of living. Currently we have the tools and ability to teach about the beginning of the life cycle. Our next challenge is to teach the final stages of life. Knowing that there are resources available in each community should facilitate this process for the teacher.

PREPAREDNESS

FOR MULTIPLE ROLES:

FHA/HERO Makes An Impact

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Young men are employed to direct child care centers, boys as well as girls earn money baby sitting, women are employed in the automotive industry and occasionally we see girls working in auto service stations. The number of individuals currently working in agencies or industries which previously preferred one sex or the other may seem insignificant right now. Yet, these incidents may be indicative of future trends wherein more varied occupational and social roles for both sexes and less stereotyping of jobs and occupational opportunities will continue to take place.

Work is an important element in the lives of most people in this country, regardless of whether monetary compensation is received or services are rendered on a volunteer basis. However, wage-earning employment is a necessity for the major portion of our society. In addition, employment in occupations that are satisfying in regard to status, skills involved, possible advancement, salary and other benefits is a major concern of many youth and adults. The concerns of students should be the concerns of educators who are providing guidance and instruction in formal educational settings and in various types of institutions.

When considering the aspirations of youth, preparation for monetary gains often looms highest in their thoughts. Marriage enters into the minds of many. The possibility of pursuing both a career which results in monetary rewards and at the same time entering a marriage contract and accepting family responsibilities is the decision made by some youth and adults. In reality, individuals choose multiple roles rather than one or the other. Their decisions involve such roles as:

- compatible partners in personal and family life
- intelligent consumers of goods and services
- active contributors to community life
- parents
- managers of resources
- wage earners

The outlook for the future, and for the present time as well, requires preparation of individuals of both sexes for varied and perhaps changing roles.

PREPAREDNESS FOR THE VOCATION OF HOMEMAKING

Preparation for the future must not be left to the future, but must begin today. Through home economics programs students can develop the skills required to function competently in a society filled with constant challenge and change. The occupation of homemaking is concerned with determining means by which to cope with changing situations. Among the necessary skills involved are abilities to

- function as a responsible family member and contributor to the well being of the community
- understand those basic similarities and unique differences of individuals living within the community with particular concern for those people with special needs
- make management decisions concerning use of our resources of time, money and energy, in ways that help individuals become intelligent consumers of family related services and agencies
- communicate in ways that lend themselves to compatible relationships within the home and in the marketplace.

Today home economics programs are preparing individuals for their various present and future roles.

FHA/HERO CHAPTER ACTIVITIES

Future Homemakers of America (FHA/HERO)—the national vocational student organization of secondary school students in consumer home economics and home economics related occupations courses—emphasizes the role of the homemaker as a vital and valued function for both men and women. In addition, activities of this vocational student organization are focused on preparation for the multiple roles its members assume now and in the future.

Through coordination of classroom centered learning situations and student directed FHA/HERO chapter activities, skills are developed which are involved in the occupation of homemaking. Such coordination leads to highly desirable levels of integration of individual, family and community endeavors with classroom instruction. Programs of instruction can be designed to provide opportunities for students to carry out chapter activities that relate to home economics course content and/or through chapter involvement provide students the opportunity to identify specific areas of concern and then center certain content for home economics courses around these identified concerns. Through such a design for the instructional program, the FHA/HERO chapter accomplishments and formal classroom course work supplement each other.

Often FHA/HERO projects serve as a catalyst for rapid development of certain abilities required to cope with various roles. Also separate classroom assignments and activities that are closely associated with chapter projects accelerate the development of such abilities as:

- understanding unique differences of individuals living within the community with particular concern for those with special needs
- making management decisions concerning use of our resources of time, money and energy in ways that help individuals become intelligent consumers of family related services and agencies.

Classroom units of study in such areas as human development, family living, consumer education, and management, have been successfully coordinated with FHA/HERO projects by some home economics teachers. Among those that appear to have considerable impact and to accelerate awareness and particular concern for individuals with special needs are projects focused on the elderly population in the community. Within the classroom, students *study about* human development in terms of the family life cycle as well as from other vantage points related to basic needs. However, when theoretical information is coupled with chapter projects that bring students into contact with "real live" elderly people who express or exhibit special needs, the impact appears to have long-lasting positive effects. Learning is enhanced.

A composite example (based on annual descriptive reports) which encompasses several similar FHA/HERO chapter activities illustrates the aid provided by the organization in understanding persons with special needs and developing managerial and communication skills. These excerpts are from activities reported under such titles as:

- Reaching out to the elderly
- Friends of the elderly
- Slave Day
- Sharing and communicating with the elderly
- Involvement in the community

Purposes of these activities:

- Become acquainted with the elderly people in the community
- Render needed service to senior citizens
- Share experiences with senior citizens
- Help teenagers recognize the problems of aged individuals
- Help teenagers recognize needs and ways of coping with problems and needs of elderly people.

Activities—in brief:

- Formed committees
- Made contacts with recreation coordinator at Nursing Home concerning appropriate entertainment
- Assisted with "Bingo" and directed other recreational activities monthly

- Prepared snacks and learned of many health problems to consider when choosing snacks or party refreshments for elderly people
- Provided a variety of services (Some services were free and some chapters had a small service charge to people requesting service, and the funds were donated to repair roof of senior citizens' recreation center).

Services included:

- Putting in storm windows
- Making trips to the post office and to stores
- Raking lawns
- Mending clothes
- Writing letters and cards

Advice to new practitioners from chapter advisers of FHA/HERO

- Increase public relations
- Plan ahead to have time to direct the activities, yet let students assume leadership
- Ask questions in classes and in chapter meetings to know why students would or would not want to make additional visits to elderly people
- Ask what kinds of needs have been met or still need to be met for senior citizens in the community
- Discuss food, housing, other physical needs and relate to real individuals observed

Problems encountered

- Free time anticipated sometimes conflicted with athletic events
- Getting students to think through what the reasons are for wanting to do certain activities. Is it something appropriate for elderly people or something you imagine will be suitable?

Concerns identified by students in FHA/HERO chapter meetings or in home economics courses that are related to human development, family living, nutrition, and housing sometimes focus on individuals at other developmental stages. These concerns may focus on preschool children, teenage youth and/or their parents. In each of these age groups there may be some persons with handicapping conditions or other special needs. Other projects have focused on the learning derived from participation in a preschool day care center where some deaf children attend and providing workshop sessions where FHA/HERO chapter members teach baking skills to mentally retarded individuals. Theoretical study about typical characteristics of individuals in any of these developmental cycles, when supplemented by chapter activities that involve actual contact with individuals with special needs, generally results in meaningful student learnings.

Aside from whatever human relations feelings that may be derived from the act of providing a "helping hand" to someone in the community, management of time, money and one's own inner resources and talents were involved in the activities described. In addition, verbal and written contacts were made with certain agencies. When students carry out such responsibilities, communication skills are involved. Such projects can aid the students in becoming prepared for various challenges that occur when one is engaged in the vocation of homemaking. We cannot overemphasize the need for developing the ability to communicate with marriage partners, creditors, agency administrators, neighbors, parents, children, and other associates.

PREPAREDNESS FOR AN OCCUPATION

Preparedness involves early recognition of requirements for entry into an occupation and knowledge of standards that must be maintained for advancement beyond that level. The FHA/HERO chapter activities contribute to the development of certain qualities necessary for employment. Some important attributes that develop through such activities are:

- team work
- good grooming
- getting along with others
- time management
- dependability
- pleasant attitude toward jobs to be done
- cooperation
- desire to learn new procedures
- willingness to follow directions

Through cooperative efforts in chapter activities students develop and improve upon their personal attributes. For example, chapter members often take field trips to observe

various facets of a particular industry as well as trips to engage in regional, state and national leadership workshops and conferences. Planning and participating in this kind and other activities of the organization requires cooperation, time management, appropriate grooming for the event and consideration of others in the group, particularly when overnight tours are made. Projects and activities that require the kinds of behaviors that employers prefer are sponsored by this vocational student organization throughout the nation. Incorporating FHA/HERO chapter projects and programs into the home economics curriculum offerings can have an impact on student learning and individuals will become better prepared for their multiple roles in society.

PROGRAM RESOURCES available from FHA/HERO National Headquarters, 2010 Massachusetts Avenue, N.W., Washington, D.C. 20036 (202-833-1925).

Program Action Impact—a kit that gives procedures for planning projects based on members' concerns and interests. Actual chapter projects are given to help chapter members analyze and raise questions about the planning steps.

Hero Pak Impact—helps for job oriented students using the IMPACT process for planning class and chapter projects.

Encounter—Personal growth experiences are planned with the assistance of this publication. Emphasis is placed on the individuality and worth of each chapter member. It is flexible and grows as individuals develop in their own style and pace.

Teen Times—the national magazine that turns chapter projects into teaching tools for other chapters. The "Diggins" section of each issue offers ideas for using that issue.

Pulse—a media kit to let potential advisors and student teachers experience FHA/HERO as a teaching tool. This kit can assist an advisor working with school administration and community; philosophy and techniques for using the chapter as a teaching tool.

Chapter Guides—the handbook of the association. Several selections are now available and others will be published as they become available. Guides contain basic facts, information and techniques for chapter use. □

USING RESEARCH RESULTS IN THE CLASSROOM

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The constant change that is occurring in the world in which we live necessitates a continual restructuring of home economics programs. Some of the changes that are affecting home economics offerings include different responsibilities of adolescents and young adults, the changing definitions of masculine and feminine roles, new products for use in clothing and household textiles, and new food products.

The home economics teacher is confronted not only with the need to be aware of the changes that are occurring in the subject matter areas of home economics and in the students in the classroom but also with the need to evaluate the relevance of the changes in the context of a given home economics program. While several approaches could be used to aid in implementing desirable changes in the home economics program, one approach is through reading and evaluating research findings, and subsequently, becoming a user of relevant research results.

Research results can be used in several ways by the home economics teacher. These include:

- updating of subject matter taught in the classroom
- adopting new methods of teaching aspects of the home economics program
- determining knowledge and attitudes of students using data collection devices from research reports
- identifying different subject matter emphases due to changing living patterns of students
- helping students acquire the critical thinking skills associated with evaluation of research findings.

How, then, does a teacher become a critical evaluator and user of research results? While the ability to evaluate research improves with practice, all evaluation centers around an analysis of the basic components of research. These components are (1) the problem, (2) the sample, (3) data collection techniques, (4) data analysis methods, (5) interpretation of findings. Each component of research will be briefly discussed. A checklist for evaluating research is presented in Table 1 and basic terms are defined in Table 2. The tables represent a summary of the following discussion and are included as a guideline to be used in evaluating research.

PROBLEM

The first concern of the teacher is to evaluate critically the problem investigated. If the problem is of significance, then the research report warrants further study. If the problem is not relevant to the teacher's concern, s/he directs attention to other reports.

Given that the problem is of significance, attention is focused on the stated objectives or hypotheses. Clarity of purpose and reasonableness of proposed relationships are considered in the evaluation of objectives or hypotheses. Studies may have objectives and/or hypotheses dependent upon the nature of the study. An objective is a declarative statement indicating an intent to discover "what is" or an intent to study the relationship between two variables. An example of the first type of objective for a study might read, "To indicate the use of consumer credit by adolescents, ages 16-18." The second type might be, "to compare the use of consumer credit between 16-18 year old men and 16-18 year old women."

A hypothesis is a specific form of an objective which seeks to explain the relationship

between two variables. A hypothesis may be stated in the declarative, directional, question, or null form. An example of each type of hypothesis statement is:

Declarative: Men, ages 16-18, differ from women, ages 16-18, in the use of consumer credit.

Directional: Men, ages 16-18, are more frequent users of consumer credit than are women, ages 16-18.

Question: Do men, ages 16-18, differ from women, ages 16-18, in the use of consumer credit?

Null: Men, ages 16-18, do not significantly differ from women, ages 16-18, in the use of consumer credit.

Regardless of the form in which the hypothesis is stated, it is usually tested in the null form. While the investigator might indeed expect use of consumer credit to vary between men and women, the statement of "no significant difference" is used because it is better suited to the available statistical techniques.

Hypothesis variables are the specific factors investigated in the study; they may be either independent or dependent. An *independent variable* is the factor which is manipulated by the investigator or the factor that would be manipulated if freedom existed to do so. The *dependent variable* is a factor which varies as a result of changes in the independent variable. In the example provided, sex is the independent variable and use of consumer credit, the dependent variable.

Other areas for study in relationship to the problem statement include:

- adequacy of definitions of variables
- clarity of stated objectives or hypotheses
- consistency of the hypotheses with known facts or prevalent theory or, if inconsistent, the believability of the arguments set forth
- relationship and differences between the reported study and other similar studies reported in the literature.

SAMPLE

Whether or not a research report on a problem of concern to the home economics teacher is of use will be partially dependent upon the nature of the sample. The sampling unit studied in the research needs to be similar to the setting in which the results will be used. Thus, knowledge of consumer credit habits of 16-18 year old adolescents may be of limited use to the teacher of 12-13 year olds. Consideration also needs to be given to the geographical location of the respondents, e.g., urban, rural, or inner-city. If widely differing in area of residency, then the results may again be of limited value. The greater the number of differences between the sampling units and the target group to which the home economics teacher wishes to apply the results, the greater the care that must be exercised in the generalization of findings.

The concept of the sampling unit can be extended to research in the subject matter areas of home economics but then the sampling unit is conceived of not as persons but as bolts of fabric, types of appliance, cuts of meat, or whatever is the unit being studied in the reported research. While no *rigid* numerical guidelines can be provided, in general, results based on data from larger groups, i.e., greater than 100, are more trustworthy than that from smaller groups, i.e., less than 50. In addition, larger sample sizes are needed when the sample is heterogeneous rather than homogeneous, when small differences are expected between groups, and when the total sample is to be divided into subgroups.

The manner in which the sampling units are selected as well as the number from which data are obtained is also of concern. In general, a random procedure for selection of sampling units is preferred because random sampling methods are more likely to produce a sample which is representative of the population from which it is drawn. Techniques include random sampling, stratified random sampling, cluster sampling, area sampling, or any combination of the above.

While random selection techniques may have been employed to select the sample, the percentage of sampling units from which data are obtained needs to be studied. If data are present from 90-100% of sampling units, the effects of bias due to differences between those sampling units responding and those not responding can be considered negligible. If, in the consumer credit study, 90% of both the men and women invited to participate respond to the

TABLE 1. CHECKLIST FOR EVALUATING RESEARCH

Questions	Yes	No	Cannot Determine
Problem			
Is the problem studied of significance?			
Are the hypotheses or objectives clearly defined?			
Are the hypotheses or objectives consistent with facts? beliefs? theory?			
Are the variables studied carefully defined?			
Sample			
Are the characteristics of the sampling unit identified?			
Is the sample size specified and adequate?			
Is the method for sample selection explained? Is number of respondents given?			
Data Collection Technique			
Is evidence of validity provided?			
Is reliability data available? Is the level adequate?			
Are measurement data objective?			
Analysis Methods			
Are statistical techniques appropriate for the data analyzed?			
Interpretation			
Are conclusions drawn consistent with data presented?			
Are conclusions limited to the group from which the sample was drawn?			

TABLE 2. DEFINITION OF RESEARCH TERMS

Research Terms	Definition
Objective	A statement of the purpose(s) of a study.
Hypothesis	A statement of a research report which delineates the variables studied and the proposed relationship between the variables.
Null hypothesis	A hypothesis stated so that no difference or no relationship is hypothesized.
Independent Variable	A factor which is manipulated by the investigator or a variable which would be manipulated by the investigator if freedom existed to do so.
Dependent Variable	A factor which varies as a result of change in the independent variable.
Sample	A subset of all sampling units that possess a specified characteristic.
Sampling Unit	The unit used as a basis for sampling.
Sampling Method	The technique used in obtaining a sample; usually, random sample, stratified random sample, or cluster sample.
Random Sample	A sample selected in such a way that each sampling unit has an independent and equal chance of being selected.
Cluster Sample	A sample selected in such a way that each sampling unit is a pre-existing group and the groups are usually selected randomly from a larger collection of clusters.
Content Validity	The degree to which the actual content of the device reflects the designated original plan for the device.
Reliability	A measure of the consistency of scores obtained from a device.
Objectivity	The extent to which equally competent scorers obtain similar resuls when scoring a device.
Descriptive Statistics	Statistics which are used to describe data. The most common examples are the mean, median, and standard deviation.
Inferential Statistics	Statistics which are used to determine a) differences or relationships between groups b) prediction and selection of individuals or groups Examples are chi-square, t-test, and analysis of variance.

questions asked, then results can be considered dependable. Studies frequently report data, however, from 50% or less of the sampling units. Data from such a study are considered to have sampling bias because the units from which data were obtained are usually different from those that did not respond. If, in the consumer credit study, responses from only 50% of the men and women were obtained, sampling bias would be expected. Bias is expected because the men and women responding are more like volunteers and volunteers are often different from other respondents. In this example, either those using credit or those not using credit may be more likely to respond. Unfortunately, the investigator is not likely to know which group is responding. Conclusions indicating over-all use of credit may, therefore, be too high or too low depending upon which group responded. Therefore, data from studies with sampling bias need to be used with caution because the results are usually not representative of the population. Further, the research consumer does not have any indication of the amount or direction of the error present in the results presented.

DATA COLLECTION TECHNIQUES

Data collection techniques used with human subjects most frequently include achievement tests, questionnaires, interviews, attitude inventories, or observational devices. Characteristics of data collection devices of concern are:

- validity (content, criterion-related, and construct)
- reliability
- objectivity

Validity

Validity, in general, refers to the degree to which the data collection device measures what it claims to measure. Content validity refers to the degree to which the sample of items in the device represents the content that the device was designed to measure. A consumer education test could be designed to measure a student's knowledge and comprehension in the areas of consumer credit, insurance, and fraud. Content validity is verified by expert opinion that the content areas assessed by the items in the device are weighted according to the plan for the device.

In general, achievement tests, questionnaires, interviews, attitude inventories, or observational devices should have some evidence presented in the research report that the device used to measure any of the variables studied has content validity. Usually, indications of content validity involve the analysis of device items by expert opinion to ascertain that each item assesses a designated topic and that the topics are represented in proportion to a preconceived plan.

Criterion-related validity refers to the extent to which responses to a device predict future performance. For example, do multiplication skills predict the use of consumer credit? Construct validity refers to the extent to which a device measures a hypothetical trait, such as sensitivity, creativity, or self-reliance. Criterion-related validity and construct validity are not characteristics usually associated with any of these devices. If the characteristics are of importance, then the topic will be addressed in the research report.

Reliability

Reliability refers to consistency or repeatability in measurement of the variable or the extent to which scores obtained on a device will repeat themselves. Thus, a test with a high reliability coefficient might have test scores for a student of 78, 77, 79 with three administrations.

Reliability coefficients range from 0.0 to 1.00 with coefficients nearer 1.00 more desirable. Some researchers feel that acceptable reliability coefficients for achievement tests are greater than 0.90, for attitude inventories at least 0.80. Because reliability coefficients of questionnaires and interviews usually need to be determined by obtaining responses from the same individual at two points in time, these two devices rarely have reliability coefficients reported. At best, similar responses to two questions approaching the same topic may be reported.

Observational devices have reliabilities reported as inter-observer reliabilities or intra-observer reliability. Some researchers feel that these should be 0.85 or greater. Inter-observer reliability is established by agreement between two or more observers; intra-observer reliability by agreement of the observer with himself after rating the same incident twice.

If the research being reviewed does not deal with the measurement of human subjects, the accuracy of the measurement still needs to be considered by the investigator or reader. If the measurement involves a physical measurement such as weight or length, then accuracy can usually be assumed.

If reliability coefficients are not sufficiently high, then the variables studied are measured less accurately and conclusions based on the research are questionable.

Objectivity

Objectivity refers to the degree to which the scores on a device are not influenced by the individual scoring the device. Devices with predesignated answers from which the respondent selects are usually the most objective. Hence, research results based on objective measurement techniques are generally more easily replicated.

Other Considerations

Unfortunately, content validity, reliability, and objectivity are not "fixed" characteristics associated with any data collection device. A device may have content validity for assessing achievement in one consumer education unit but not in another. The reason may be that one teacher stresses consumer credit, the second, insurance, and the third, fraud. Reliability coefficients determined from two administrations of a device are likely to vary due to differing characteristics of respondents. Objectivity of scoring procedures may vary with different administrations of the same device in all but the most structured-response type devices.

Because of the potential variation of these characteristics, studies using existing devices need to provide either evidence related to the reassessment of these characteristics for the study reported or viable reasons why the reassessment was not necessary. It further suggests that if a teacher is considering using a device found in the literature, particular attention needs to be given to the content validity and reliability of the device for the new group.

ANALYSIS METHODS

Critiquing statistical techniques used to analyze research results is probably one of the more difficult areas of research evaluation unless the individual has been exposed to a study of statistical techniques. With this limitation in mind, an introduction to the two general approaches to data analysis is presented. Research reports utilize either descriptive statistics, inferential statistics, or both.

Descriptive statistics provide data that describe the specified characteristics of the groups studied. The mean and standard deviation are examples of statistical techniques that are descriptive in nature. The mean provides a description of the average score obtained, whereas the standard deviation provides an indication of the variability within the group. Examples of data using the mean and standard deviation would be the mean dollar expenditure per month by 18-year-old males in the United States with an associated dollar amount indicating the standard deviation.

Inferential statistics are used to determine (a) differences or relationships between groups and (b) prediction and selection of individuals or groups. The statistical techniques of chi-square, t-test, or analysis of variance are used to determine the significance of differences between groups with varying degrees of exposure to an independent variable. An example would be the differences between the monthly consumer credit expenditures of 18-year-old girls and 18-year-old boys.

Correlational techniques are used for determining the degree of relationship between two variables. Results are expressed as correlation coefficients and vary between -1.00 and $+1.00$. Coefficients near $+1.00$ suggest an almost perfect one-to-one relationship between two variables, whereas a value near -1.00 suggests *no* relationship. For example, if it is

known that available dollars correlate 0.89 with use of consumer credit, then the reader knows that as availability of money increases so does use of credit.

Studies involving prediction and selection commonly use correlation or multiple regression techniques. Prediction and selection studies are used, for example, when one is trying to predict or select individuals with a potential for success in a particular educational experience.

Results of all inferential statistics are usually expressed as significant or not significant. A significant finding indicates that the null hypothesis can be rejected. Interpreted in terms of the null hypothesis that men and women do not differ in use of consumer credit, a *significant* statistical test suggests that males and females *do* differ in use of consumer credit. Greater use of credit by males or females is determined by looking at the mean dollar credit use by each group. Further, significant findings are usually expressed at one of two levels of significance—the 5% or the 1% level. This terminology means that the null hypothesis will be rejected 95 times out of 100 (5% level) if the study is replicated, or 99 times out of 100 (1% level). In another way of speaking, there is only 5 times in 100 (5% level) or one time in 100 (1% level) that the observed phenomenon would have occurred by chance.

Caution must be exercised, however, in the "too-rigorous" interpretation of levels of significance because statistical significance is affected by the number of sample units involved in the research study. For example, with 500 sample units, a correlation coefficient of 0.12 is significant at the 1% level. Inspection of the numerical size of 0.12 of the correlation coefficient suggests the relationship between the two variables is very slight and would probably be of little value as a basis for designing educational change. Therefore, it becomes imperative in interpreting research that not only is the *theoretical* level of significance of the findings noted but also their *practical* significance. Emphasis needs to be placed on devising program changes using those variables that account for a substantial proportion of the differences or relationships between variables.

INTERPRETATION

A study of the interpretation of results reported focuses on the consistency between results presented and conclusions drawn. Data presented related to use of consumer credit permits conclusions related to its use but not to conclusions related to money management practices in general. Further, data collected from one age group and/or geographical area cannot reasonably be generalized to other age groups or geographical area. The reader of research reports must be wary not only that the investigator has not overextended findings but that s/he (the reader) does not apply findings to inappropriate situations.

AND NOW—GO FORTH!!

An overview of the skills needed to review research reports as well as some of the potential uses of research results in the classroom have been suggested. Reports of home economics-related research are available in the following publications as well as journals specializing in one aspect of home economics:

- Home Economics Research Journal
- Home Economics Research Abstracts
  - Home Economics Education
  - Family Relations and Child Development
  - Textiles and Clothing
  - Food and Nutrition; Institution Administration
  - Art; Family Economics-Home Management; Housing, Furnishings, and Equipment
- Journal of Home Economics

For availability, contact the American Home Economics Association. If personal copies are not available, perhaps purchase of these publications could be suggested to local school districts, city supervisors of home economics, regional media resource centers, or the home economics division in the state public educational division.

It must be realized that the ideas presented in this paper are not an exhaustive list of items to be considered in the critical evaluation of research nor are the suggestions for the use of research results all-inclusive. Rather, these suggestions are intended as a cornerstone upon which the home economics teacher can build in reviewing and using research results in the classroom.

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Cultural Aspects of Housing Consumption

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The purpose of this paper is twofold: to illustrate the research process and to provide current information in the areas of housing and consumer economics. First, the *theory* guiding the research is presented. A theory is a thought-out explanation of apparent relationships of certain phenomena. The researcher develops a *hypothesis* or question and then follows a procedure for gathering information (*methodology*) to answer the question from real life situations. After information or data are gathered, the researcher analyzes or organizes and examines the data. From the *data analysis* conclusions are drawn in relation to the hypothesis. Often additional information is discussed in the research report to encourage further research.

THE THEORY

The culture in which one lives shapes his environment. Underlying most housing choices are the norms of society. Family housing adjustment theory developed by Morris and Winter[1] emphasizes norms. Families are viewed as evaluating their housing in terms of cultural and family norms. Cultural norms are shared standards for behavior or conditions in the society. Family norms are the family's standards for its present situation.

A general hypothesis that low income families have standards that differ from those of other families is often found in a "culture of poverty" approach.[2] This approach is based on the idea that poor people have unique standards of their own. Assessment of the low income family's housing standards is becoming very important as government housing projects for the poor are being evaluated and more projects are being planned.

U.S. Census data reveal that housing conditions of low income families are poorer than the conditions of other families. Although differences in housing conditions do exist, using actual housing conditions as a measure of housing standards to support the idea of a "culture of poverty" is problematic. According to Morris and Winter:[3]

> One of the most important distinctions to be made is between norms and behavior or between norms and actual conditions. Cultural norms are rules for behavior; they state what behavior or conditions are prescribed or proscribed. They are not the behavior or conditions themselves. Thus, neither the average behavior of a group, nor the typical conditions under which they live are to be thought of as cultural norms. Behavior may deviate from the norms to the extent to which people cannot or will not conform.

THE HYPOTHESIS

This study involves identification of cultural and family housing norms and compares the level of achieved housing to the norms. The hypothesis is to be tested was that low income families have housing standards that differ from housing standards of other families. If this hypothesis is supported, it could be concluded that low income families represent a housing subculture which would provide additional support for a "culture of poverty" approach in housing.

The research for this paper was funded by Project 2115 of the Iowa State University Agriculture and Home Economics Experiment Station. The author is indebted to Earl W. Morris for his critical reading of this paper.

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[1]E. W. Morris and M. Winter, "A Theory of Family Housing Adjustment," *Journal of Marriage and the Family*, 37 (1975), 79-88.

[2]O. Lewis, "The Culture of Poverty," *Scientific American*, 215 (1966), 108-116.

[3]E. W. Morris and M. Winter, *Housing, Family and Society* (Ames, Iowa: Authors, 1974), p. 15.

METHODOLOGY

Interviews were conducted in 308 households in a small city (30,000) in north central Iowa to collect the data. The 308 families are referred to as the sample and the person interviewed from the household is referred to as the respondent.

Cultural norms were derived from three questions about the respondent's feelings regarding (1) the best ownership (tenure) arrangement for the average American family, (2) the best type of structure for the average American family and (3) what per cent of income the average American family should spend on housing. The responses on tenure were divided into two categories, those reporting conventional ownership and those reporting other forms of ownership or rental. The responses on structure-type were categorized into those reporting the single family dwelling and those reporting other types. The responses on "per cent" expenditures were also divided into two categories, those reporting between 20 to 30 per cent of income should be spent on housing and those reporting other responses above or below the 20 to 30 per cent range.

Family norms were measured by three questions based on the "best tenure and structure-type and the per cent of income that should be spent on housing for their own family right now." Responses to the family norm questions were divided into the same categories as were the cultural norms.

Achieved tenure and structure-type were measured by two questions about the type of structure presently lived in and whether the dwelling was owned or rented. The expenditures for achieved housing were based on a series of questions requesting dollar amounts spent in 1974 on mortgage or rental payments, utilities, insurance, repairs and maintenance and taxes. The housing expenditures for each family were totaled and then converted into a percentage of their 1974 gross income.

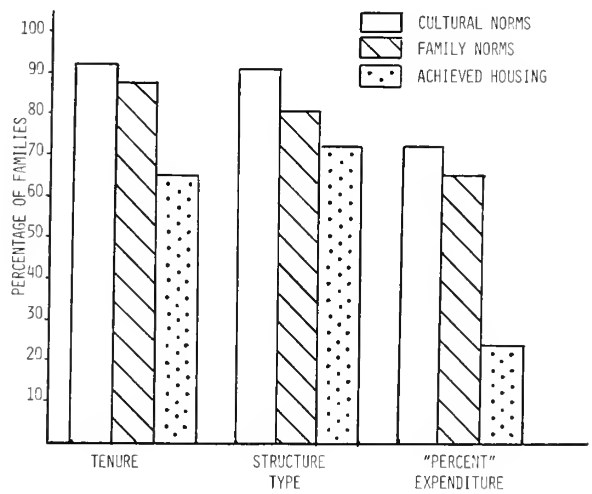

FIGURE 1. Consensus among cultural norms, family norms and achieved housing.

DATA ANALYSIS—GENERAL

Figure 1 is based on the responses of all 308 families. In terms of cultural norms, 94 per cent of the respondents reported a tenure norm for ownership and 92 per cent reported a structure-type norm for a single-family dwelling. In terms of the "per cent" expenditure norm, there was less agreement among the respondents. Seventy-four per cent of the families responded with a per cent for the cultural norm on expenditures that fell within the range of 20 to 30 per cent of income should be spent on housing. In terms of family norms 87 per cent of the families favored ownership, 82 per cent favored single-family dwellings and 66 per cent favored a "per cent" housing expenditure between 20 and 30 per cent of income.

When achieved housing was assessed, 66 per cent of the families lived in owned homes and 73 per cent lived in single-family dwellings. Thirty-four per cent of the families were renters and 27 per cent lived in multi-family dwellings. Only 24 per cent spent within 20 to 30 per cent of their incomes in 1974 on housing. Fifty-six per cent of the families were paying under 20 per cent of their income for housing and the remaining twenty per cent were paying over 30 per cent of their income for housing.

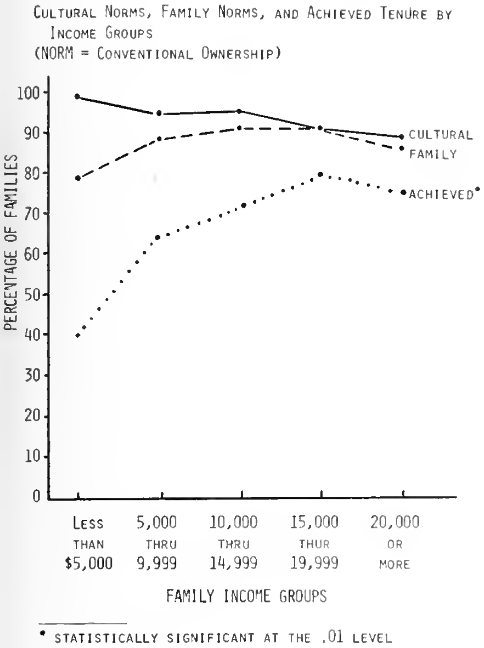

FIGURE 2. Tenure.

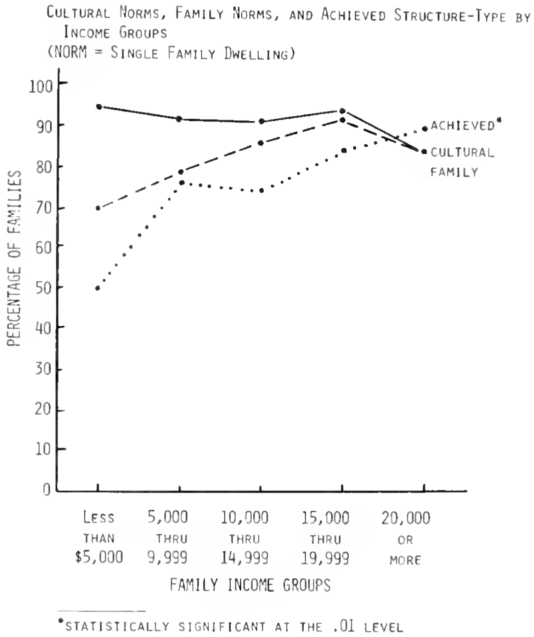

FIGURE 3. Structure-type.

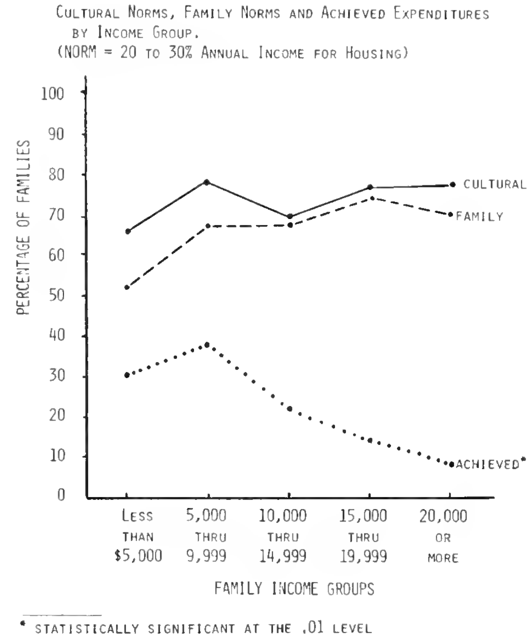

FIGURE 4. "Percent" housing expenditure.

DATA ANALYSIS—INCOME GROUPS

Graphs illustrating the analysis of the differences among families in the five income groups are presented for each housing area in Figures 2, 3, and 4. Chi-square analysis was used to test the significance of the difference for each norm or level of achieved housing between the income groups in order to determine whether the relationships are just a matter of chance.

In relation to tenure (Figure 2), the percentage of families reporting that the best tenure arrangement for the average American family is ownership varied among the income groups but not significantly; that is, the differences could be only chance variation. More families in the low income group (98%) reported ownership as a cultural norm than in any of the other income groups. Fewer families in the low income group (78%) than in the other groups favored ownership for their families. The differences in family tenure norms among income groups were not statistically significant. A significant difference was found, however, in achieved ownership among income groups. The low income group has fewer owners (41%) than do the other four income groups (64%, 71%, 79% and 75% respectively).

The structure-type analysis (Figure 3) shows similar results. More people (95%) in the low income group report the single family dwelling as the cultural norm and fewer people (70%) in the low income group favor the single-family dwelling as a family norm than in the other income groups. Neither the differences in structural-type cultural norms nor family norms among the income groups are statistically significant. There is, however, a significant difference among the income groups in the percentage of the families who live in single-family dwellings. Fewer families in the low income group (49%) than in the other income groups (76%, 74%, 84% and 89% respectively) actually live in single-family dwellings.

No significant differences in "per cent" housing expenditure cultural or family norms were evident among the income groups (Figure 4). Fewer families in the low income group than in the other groups reported in the 20 to 30 per cent range as the cultural norm or responded in that range for their family norm. Again, however, there was a statistically significant difference among the income groups in terms of the number of families who actually spent within the range of 20 to 30 per cent of their income on housing in 1974. Fewer families in the two highest income groups (14% and 8%) spent within the 20 to 30 per cent range than did the other groups (30%, 38% and 22%).

From the data presented in Figures 2, 3 and 4 it appears that neither the cultural nor the family norms differ significantly among income groups. Achieved or actual housing, however, does differ significantly among the income groups.

DATA ANALYSIS—ADDITIONAL INFORMATION

A preliminary analysis has been done to test the influence of the tenure, structure-type and expenditures family norms on housing satisfaction.[4] According to family housing adjustment theory, if a family's housing fails to meet its norms, a housing deficit exists. Housing deficits are calculated by subtracting the norm from the achieved level of housing. Housing deficits that are important to the family tend to contribute to housing dissatisfaction.[5]

Distribution of deficits among the income groups showed that owner tenure deficits, single family structure deficits and overspending deficits were concentrated within the low income group. This means that more families within the low income group than within the other groups are renters and desire to be owners, desire a single-family dwelling but do not live in one, and pay more for housing than they desire. In terms of satisfaction, families who were renters and wanted to be owners were the most dissatisfied of the families. Work is presently under way at Iowa State University to further develop the satisfaction analysis.

Because home ownership was such a strong influence on housing satisfaction, the researcher went on to relate tenure and housing expenditures. The sample was divided into three groups; renters, owners paying house payments and owners with payments completed. Renters on the average spent 25.5% of their annual income for housing. Owners with payments averaged 23.0 per cent and owners paid up averaged 15.3 per cent of annual income for housing expenditures. As one might expect the owners with paid up mortgages were the most satisfied with their housing and the renters were the least satisfied of the three tenure groups.

In terms of the income groupings, the upper income groups were paying less than 20 per cent of their income for housing. Over half of the families who were paying more than 30 per cent of their income for housing were in the low income group. Three-fourths of the low income renters were spending over 30 per cent of their income for housing. Most of the lower income owners had paid up mortgages, but the few owners who were paying mortgage payments were all spending over 30 per cent of their income for housing. No one in the upper income group was paying more than 30 per cent of income for housing.

CONCLUSIONS

The purpose of this study was to test the hypothesis that low income families have housing standards that are different from housing standards of other families. The findings of this research project do not provide any support for the hypothesis in regard to tenure, structure-type or expenditure norms. No significant differences were found in the reporting of cultural and family norms among families classified into 5 income groups. However, significant differences were found to exist in achieved housing. Therefore, families in all income groups have similar housing norms but differ in achieved housing. □

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[4]Sue R. Crull, "A Normative Approach to Housing Satisfaction" (speech given at the American Home Economics Association Annual Meeting in Minneapolis, Minnesota, June 30, 1976).

[5]E. W. Morris, S. R. Crull, and M. Winter, "Housing Norms, Housing Satisfaction and Propensity to Move," *Journal of Marriage and the Family,* 38 (1976), 309-321.

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Tomorrow is the first day of the rest of your life.

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Microbiological Quality and Cooking Losses of Rump Roasts Cooked at Low Temperatures in Crockery Pots or in Ovens

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The electric crockery pot, a new appliance designed for slow, unattended cooking, has become popular because of its convenience, its economy of fuel consumption and suitability for cooking inexpensive meat cuts. Questions have been raised, however, about the bacterial hazards of cooking at such low temperatures for long periods. Wells and Kennedy[1] studied the survival of naturally occurring mixed flora and of inoculated single cultures in slow-cooked hamburger, green beans and chicken à la king. They concluded that pathogenic bacteria such as staphylococci, salmonellae and vegetative cells of clostridia would be destroyed if the homemaker cooked the foods for the time recommended in the recipes. But to confirm the safety of long, slow cooking in crockery pots or ovens, more information is needed about the survival of bacteria in other foods.

Opportunity exists for bacterial contamination of rump roasts during handling by the meat cutter as he bones and rolls the meat. Vegetative cells and spores of *Clostridium perfringens* are among the bacteria that could be introduced. Records of the U.S. Department of Health, Education, and Welfare, Center for Disease Control, indicated that, in 1974, *C. perfringens* was implicated in 863 cases of confirmed foodborne disease; most of the cases were caused by contaminated meat dishes.

In our research, we selected *C. perfringens* as a test organism to measure the safety of rump roasts cooked at low temperatures for long periods. This widely distributed organism has a short generation time of 8.5 minutes under ideal conditions. Vegetative cells of *C. perfringens* can grow at temperatures from 60° to 120°F (16°C to 49°C),[2] and spores can survive even higher temperatures. During cooking in a crockery pot on low setting, the center of rump roasts might be in the growth zone for as long as 2 hours.

Ingestion of a sufficiently large number of vegetative cells of *C. perfringens* could cause a form of food poisoning characterized by diarrhea without vomiting. Onset of the illness usually is 8 to 16 hours after ingestion of the contaminated food and the duration is one day or less.

In addition, we determined the survival of aerobic bacteria that are present on rump roasts. Such genera as *Pseudomonas* and *Achromobacter* belong to this natural flora that are primarily cold-tolerant organisms. Although they are not food-poisoning bacteria, they can cause spoilage of meat.

After the safety of slow cooking in an oven or crockery pot to a specified end point is established, prediction of the cooking time required to reach that temperature is important. If the meat were removed before the recommended time, bacteria initially present or that multiplied in the early stages of cooking would not have been destroyed.

The cooking method and the cooking time affect the yield of cooked meat. Little is known about how cooking meat all day in a crockery pot affects the weight losses. In one report, frozen top round roasts cooked to 158°F (70°C) in a slow cooker at 185°F (85°C) for 6¾ hr had total losses of 28%, compared with 32% for roasts cooked in a rotary hearth oven at 200°F (94°C) for 10¼ hr to the same end point.[3]

The main objective of our investigation was to compare the survival of aerobic organisms and of *C. perfringens* vegetative cells and spores in rump roasts cooked at low temperatures in crockery pots or ovens or at moderate temperatures in ovens. Also, data were obtained on cooking time and cooking losses.

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[1]F. E. Wells and L. J. Kennedy, "Thermal Death Studies on Bacteria Associated with Foods Prepared in Low Temperature-Long Time Cookers," Final Report, MRI Project No. 3683-B, 1972, Midwest Research Institute, Kansas City, p. 47.

[2]Celsius temperatures added by Judy Oppert.

[3]E. K. Vollmar, D. L. Harrison, and M. G. Hogg, "Bovine Muscle Cooked from the Frozen State at Low Temperature," *Journal of Food Science*, 41(2) (1976), 411-416.

Journal Paper No. J-8557 of the Iowa Agriculture and Home Ec. Experiment Station, Ames, Iowa. Project No. 2060.

PROCEDURE

In our research on the microbiological and physical characteristics of meat cooked at low temperatures, three methods were used for cooking the roasts: (1) crockery pot set on low (CP) for 10 hr, (2) oven set at 225°F (107°C) (LO) for 9 hr, and (3) oven set at 350°F (177°C) (MO) to a final internal temperature of 170°F (77°C). The period of 10 hr for the CP method was selected to represent all-day cooking. For the LO method, 9 hr was selected because preliminary studies indicated roasts cooked any longer were shrunken and charred. The end point of 170°F (77°C) (well done) was selected for the MO roasts. The three treatments were replicated four times, a total of 12 roasts. We used a Rival Crock-Pot, model 3100, 3½-qt. capacity, fitted with a ½-in. tall, circular rack. The ovens were in 30-in. ranges made by General Electric Co., model J390.

The rolled boneless rump roasts (3.5 lb) were purchased at a local supermarket and were cut to order from the same location in wholesale beef rounds. Appropriate procedures were used to prepare an inoculum suspension that contained 700 million vegetative cells and 200,000 spores of *C. perfringens*/ml.[4] Each roast was unrolled, and the inner cut surface was inoculated by covering the marked area with measured amounts of the inoculum. After a thin sample was removed from the inoculated surface, each raw roast was rerolled, inserted into fresh webbing and cooked by one of the three methods.

For the CP method, the roast and Crock-Pot were weighed, and an iron-constantan thermocouple, encased in a hypodermic needle, was inserted into the center of the roast. Another thermocouple was suspended between the roast and the side of the pot. The holes in the flat stainless-steel lid of the crockery pot were sealed with split corks that held the thermocouples in place. After the control on the pot was turned to the low setting, the rise in temperature of the air and of the roast was recorded during the 10-hr cooking period.

Each roast to be cooked in the oven was placed on a rack in an aluminum roaster pan and weighed. A thermocouple was inserted into the center of the roast, and the termocouple for air-temperature measurements was suspended near the center of the oven cavity. The oven was turned on after the roast had been placed in the oven. Roast and air temperatures were monitored throughout cooking.

Cooked roasts and also the drip that had accumulated in the Crock-Pot or roaster pan were weighed to obtain data for calculation of cooking losses. The cooked roast was unrolled, and observations on the appearance were recorded. Then a thin sample of the inner surface area (inoculated before cooking) was removed for microbiological analyses.

To determine survival of the bacteria, raw or cooked roast samples were homogenized. Then appropriate methods of heat shock, plating and incubation were used for enumeration of aerobic bacteria and of *C. perfringens* vegetative cells and spores.[5]

RESULTS

More than 20 companies sell slow cookers, and considerable variability exists in the design and materials used in the appliances. Our results on physical and microbiological characteristics of boneless rump roasts illustrate the effects of long, slow cooking in a 70-W, 3½-qt pot with heating coils embedded around the sides of a stoneware liner. We cannot say that the results of our research would necessarily apply to slow cookers that have coils at the base rather than around the sides or that use a different wattage and thus heat the meat at a different rate.

Cooking Time and Final Internal Temperature

Roasts (3.5 lb) cooked 9 to 10 hr by the slow-cooking methods had higher final internal temperatures of 178°F (81°C) (CP roasts) or 185°F (85°C) (LO roasts) than those roasted conventionally for 2¼ hr to 170°F (77°C) (MO roasts). Calculation of cooking time on the basis of min/lb indicated that the roasts were cooked for approximately 3 hr/lb in the CP or 2½ hr/lb in the LO, compared with 40 min/lb in the MO.

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[4] A. D. Sundberg and A. F. Carlin, "Survival of *Clostridium perfringens* in Rump Roasts Cooked in an Oven at 107° or 177°C or in an Electric Crockery Pot," *Journal of Food Science,* 41(2) (1976), 451-452.

[5] *Ibid.*

Appearance

On the basis of observations after cooking, the color of the fat cover remained ivory for roasts cooked in the CP, but was golden brown or bronze for roasts cooked in the ovens. When cut or pulled apart, the lean meat of the roasts cooked in the CP had a reddish cast, but the meat of roasts cooked in the ovens was light gray or tan.

Cooking Losses

Total cooking losses of 38% for roasts cooked in the CP for 10 hr or in the LO for 9 hr were greater than the losses of 32% for roasts cooked in the MO. Thus, raw roasts weighing 3½ lb would yield ¼-lb less meat when cooked in the CP or LO than when cooked in the MO (2⅛ vs. 2⅜ lb).

Drip losses averaged 35% for CP roasts, compared with 5% for LO or MO roasts. Therefore, cooking in the CP prevented evaporation and permitted accumulation of a larger amount of drip, compared with cooking in the LO or MO. Even though no liquid was added before cooking, more than a pint of drippings was obtained for each roast cooked in the CP.

Air Temperature

The Rival Crock-Pot booklet indicates that, on the "low" setting, the temperature in the CP is about 200°F (94°C). Because the Crock-Pot is a continuous-heat type of slow cooker, the temperature of the air in the pot does not fluctuate. In our study, the air temperature rose slowly to 110°F (44°C) at 1 hr, 135°F (57°C) at 2 hr, 160°F (71°C) at 4 hr, 185°F (85°C) at 8 hr and then did not change.

Although the electric ovens were not preheated, within 15 min after the roasts were placed in the ovens, the air temperature reached the set temperature of 225° or 350°F (107°C or 177°C). Thereafter, the temperature in the oven set at 225°F (107°C) fluctuated by ± 18°F and, in the oven set at 350°F (177°C), by ± 12°F.

Roast Temperature

As Figure 1 illustrates, at the center of roasts cooked in the CP, the temperature was in the growth zone for *C. perfringens* (60°-120°F [16°-49°C]) for 2½ hr, compared with 1¼ and ¾ hr for roasts cooked in the LO and MO, respectively. Thus, more opportunity existed for increase in numbers of vegetative cells in roasts cooked in the CP and LO than in roasts cooked in the MO. On the other hand, a reduction in numbers would be expected during the period that the temperature at the center of the roasts was above 120°F (49°C), approximately 6½ hr for roasts cooked in the CP and LO, compared with 50 min for roasts cooked in the MO (Figure 1).

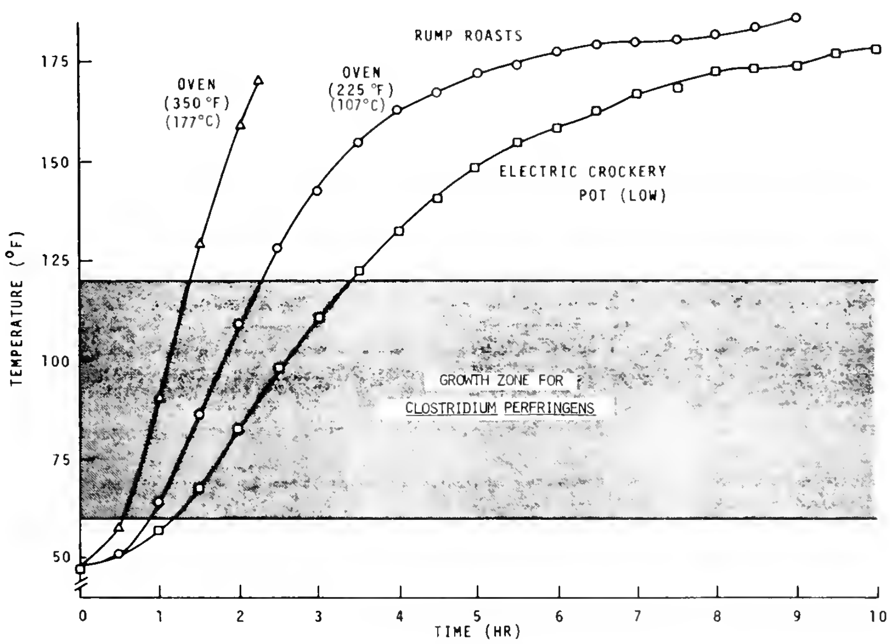

FIGURE 1. Average rise in temperature at the center in 3.5-lb rump roasts during cooking by three methods.

Aerobic Bacteria

The numbers of aerobic bacteria present on the surfaces of the raw rump roasts averaged 50,000/g. Only a few of these organisms, less than 50/g, survived cooking, regardless of the method. Thus, both long, slow cooking and conventional roasting destroyed most of the natural flora on the roasts.

Clostridium perfringens

Numbers of *C. perfringens* vegetative cells or spores that survived were approximately the same if inoculated rump roasts were cooked for 10 hr in an electric crockery pot on low or roasted for 9 hr in a slow oven or for 2¼ hr in a moderate oven. On the inoculated inner surfaces of the raw roasts, the *C. perfringens* vegetative cell population averaged 2 million/g. After the roasts were cooked by any of the three methods, the cell count was reduced by more than 99.9% to approximately 300/g. Spore counts on the raw roasts averaged 1500/g. On the cooked roasts, spore numbers were reduced by approximately 87% to 200/g, regardless of the cooking method. Inasmuch as a dose of more than 100 million organisms is required to cause *C. perfringens* food poisoning, the number of organisms remaining on roasts cooked by any of the methods should not cause illness if the meat is eaten immediately.

On the other hand, results of this investigation emphasize that roasts cooked at low temperatures for as long as 9 or 10 hr are not sterile. In the last half of the cooking period, the meat is held at temperatures that stimulate the germination and growth of *C. perfringens* spores. Furthermore, cooking destroys competing organisms and drives off oxygen, creating an environment favorable for anaerobic bacteria. Thus, surviving *C. perfringens* vegetative cells or spores could multiply rapidly to numbers sufficient to cause food poisoning if the meat were held in the oven or crockery pot for several hours at room temperature. Hence, any leftover meat should be refrigerated as soon as possible.

CONCLUSIONS

From our research on the effect of long, slow cooking on rump roasts inoculated with *C. perfringens*, we conclude that

(1) cooking losses are increased in roasts cooked 10 hr in a crockery pot set on low (200°F [94°C]) or 9 hr in an oven set at 225°F (107°C), compared with losses in roasts cooked to 170°F (77°C) in an oven at 350°F (177°C), and

(2) the numbers of *C. perfringens* vegetative cells and spores that survive is similar whether inoculated roasts are cooked at low temperatures for long periods or at conventional temperatures for shorter periods. Beef roasts cooked all day in the crockery pot or slow oven should not cause food poisoning if the meat is eaten immediately. But neither long, slow cooking nor conventional roasting sterilizes the meat; thus, prompt refrigeration of leftover meat is necessary. ☐

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Work simplification leads to obesity unless other work is added as present work becomes easier.

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

HOME ECONOMICS IN TRANSITION in the MIDDLE/ JUNIOR HIGH SCHOOL

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The late 1960's saw the emergence of the middle school movement across the United States. It now appears that this movement is on the upswing with increasing numbers of schools moving away from the traditional junior high structure of grades 7 through 9 to the 5 to 8 middle school organization. With systems moving the 9th grade to the senior high school building, the program for the transescents is freed to become more child centered with less emphasis on subject matter structure. With the focus on the learner there is greater potential for a realization of an exploratory program which is viewed as a vital characteristic of the middle school curriculum.

Exploratory Classes

Many teachers of home economics at the junior high school level, like teachers of other subject areas, have slipped into using a traditional subject matter approach to their teaching. In an exploratory type program, however, students are to examine all areas of home economics for brief periods of time. Later, at the senior high school level, they will be provided opportunities to choose areas in which they elect to study in greater depth. We need to limit the exploratory program to the content that is most basic and meaningful for the learners at their stage of development. Time limitations for students to study home economics, as cited earlier, place practical constraints, too, on coverage. Whereas this condition can be viewed as detrimental, it may be an incentive for planning a more effective program to meet the needs of the early adolescent learner.

Teaching the Emerging Adolescent

Another change for home economics being fostered by the middle school is the potential for working with students of a younger age than we have had in our junior high school classes. Most middle schools include sixth grade and some, fifth grade. Home economics offerings at these levels may be mini-units of one period a week for 6, 9, or 18 weeks or concentrated courses, meeting one period daily for a limited number of weeks. Courses of such short duration allow for exploration of a wide variety of areas and take into account the short interest span of the emerging adolescent. Unfortunately, at present, there are only a limited number of such programs.

How many teachers who find themselves now teaching in the middle school have been prepared to work with the emerging adolescent student? What do we know about how they think and respond or the abilities and needs of these new students? What teaching strategies are most effective for them? What adjustments in the physical environment of the home economics department need to be made to promote good working practices? What are the educational needs related to personal and family life that we can help these youth meet as well or better than other subject areas or services of the school?

Home Economics Concepts in Elementary Grades

An exploration of content included in books used in the elementary grades has shown that many home economics concepts are included. Books used in science, social studies, and

communicative art classes, especially, contain home economics related concepts as a vehicle for teaching skills in these respective areas. If the home economics teacher were a member of the core team, he or she could supplement the learnings by helping students use these same concepts in improving their own lives. Are we aware of the exposure to content these students have had prior to our working with them?

The "Basics"

There is another development in education today that could have an impact on home economics programs. Throughout the country, there tends to be a concern for "going back to the basics." What is meant by "back to the basics" is uncertain. But taxpayers are saying, "Cut out the frills in education." Some are classifying home economics, particularly at the middle school level, as a frill. Yet, what is more basic than helping individuals at this formative age to grow as healthy individuals and to lay a foundation early for a good home life. Our primary concern in home economics is to prepare youth to become well adjusted beings and successful family members. We are challenged to help others understand that home economics is not a frill but is a basic part of education for every youth.

HOME ECONOMICS IN THE MIDDLE SCHOOL

What assistance in the growth and development of the pre- and emerging adolescents can home economics best contribute to the total curriculum of the middle school? The kind and extent of the contribution varies greatly due to the wide variability in the curricular structure and the way it is carried out among middle schools across the country. It is also influenced by the teaching personnel and other resources available including the physical facilities. Even though the way the program is implemented varies widely, it nevertheless is built on purposes that are widely accepted.

A recognized leader of the middle school movement, Conrad F. Toepfer, Jr.[1] has identified four major purposes of the middle school as (1) exploring individual interest and needs, (2) developing a realistic and positive self concept, developing individual social, intellectual and living skills, and (4) formulating future roles in ensuing school, occupational and societal settings.

It is evident that home economics has much to contribute to the curriculum of the school in reaching each of these purposes. In some schools the home economics program is encouraged to contribute to its fullest capacity and in others it is held to making limited contributions. Some administrators have recognized the potential home economics has in helping the emerging and early adolescents in their search for self-identity, in identifying their strengths and weaknesses, developing such basic skills as learning how to learn and decision-making, in developing skills in personal and family life, and in exploring possible career choices in home economics-related areas.

In other schools, the home economics program tends to be much more limited. It may be locked into a skill-oriented program working mainly in, or in conjunction with, such areas as crafts, art, and/or industrial art. Such courses are commonly referred to as related art. The supporters of such programs see home economics classes as providing opportunities for students to have freedom of movement and release of energy, as well as opportunity to explore their talents and their world. Some teachers have proven to be very resourceful, however, in finding ways to integrate home economic concepts within this limited structure. Another kind of limitation is placed on the program when home economics is teamed with certain subject areas, such as the social sciences, that tend to dictate the scope and sequence of content to be taught. Much can be said as to the merits of the team approach as a way of helping the student see relationships across subject areas so as not to fragment knowledge. It also is a way of motivating students to become interested in subject areas that otherwise may have little appeal or meaning. But the question can be raised, are these the best contributions home economics can make to the educational needs of these youth?

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[1]Conrad F. Toepfer, Jr. in an audio-film strip presentation. Educating Emerging Adolescents: Some Operational Problems. Association for Supervision and Curriculum Development and Educational Leadership Institute, Inc., 1973.

With the inclusion of sixth grade students in the middle school, the potential exists for expanding the home economics program to lower levels. Both teachers and administrators are pondering, however, as to what the offerings can or should be. Very few guidelines can be found in the literature or in curricular resource guides. Most guidelines now available are prepared for use with seventh- and eighth-grade classes.

Recognizing the need for strengthening the curriculum, a research project was initiated over three years ago at Iowa State University to identify sound bases for structuring curriculum and to explore teaching-learning strategies and program organization that are in keeping with the purposes and philosophy of the middle school and home economics education. Work has concentrated mainly up to this time on the sixth grade since so little has been done at this level, and the direction needs to be established here before work can proceed at higher levels.

First steps in the project were becoming acquainted with the literature of the middle school movement, conferring with nationally recognized leaders of the movement, and visiting schools with differing implementation of the tenets of the movement. At the same time a critical study was being made of the characteristics and educational needs of the emerging adolescent as related to personal development and home and family life.

Among the conclusions drawn were that, first and foremost, the curriculum should be child centered, not only in content but in the approach to instruction. It should be flexible to take care of the wide range of variability in individual rate and stage of development. Flexibility enters in, too, because of the wide differences in potential ways and means of implementation among schools. The curriculum should aid the learner in interrelating knowledge of various facets into meaningful units.

The conclusions were studied for implications as related to home economics. As a result a model for curriculum development emerged as shown in Figure 1.

The encompassing emphasis of study according to this model would be a developmental task of the emerging adolescent. The approach to helping the student in working toward the achievement would be through some everyday activity in which s/he is immediately involved and vitally interested. The teaching-learning strategies include the content from interrelated areas of home economics and provide the substance in a setting meaningful to the learner. They are expected to help him/her accomplish the task.

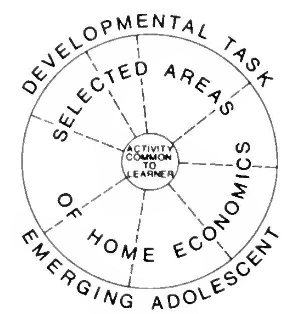

FIGURE 1

Of the developmental tasks of the emerging adolescent, four were identified as those which home economics could especially assist the learner in achieving. These were

- Developing Self
- Being a Family Member
- Being a Consumer
- Becoming Employable

The everyday activities used as the setting for the learning were selected because they proved to be most commonly done by the largest number of Iowa sixth-graders as indicated by survey.[2] The selection and combination of content areas within home economics were based on appropriateness of content in relation to the task and logic of combination. The curricular suggestions as related to each task have formed a unit bank made up of numerous developed topics from which a teacher can select according to the needs of the class and the resources available for instruction.

In the early stages of developing the model, nationally-recognized leaders of the middle school movement were consulted to validate the rationale. Strong encouragement to pursue the effort was received. Teachers with experience in working with the early adolescent became involved in further development of the materials; others used portions of them with their classes. Following the trial use, the materials were strengthened and others prepared. Plans for the coming year include completing the unit banks, preparing evaluation instruments to accompany the unit banks, and field testing the materials.

The research effort is viewed as a benchmark study that is expected to strengthen the home economics programs not only in Iowa but across the country. School administrators have enthusiastically accepted the theoretical structure and model in which these curricular materials are based and are supportive of having their teachers implement the guidelines in their programs.

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[2]Patricia Ann Gasparini, "Activities Related to Personal and Family Life of Iowa Sixth-Grade Pupils" (unpublished master's thesis, Iowa State University, Ames, Iowa, 1973).

CONCLUSION

Continuously, there are developments occurring in education that have an impact on the home economics program. Our success in dealing with these developments depends upon our ability as home economics educators to cope with change.

Currently home economics teachers are attempting to adjust to working with boys and girls in the same class; working with classes of students having varying backgrounds, and having fewer girls in their classes as well as having girls for shorter periods of time than in the past. The middle school movement has encouraged child-centered teaching with an exploratory emphasis, brought to the department a younger student than we have had previously, and made us more aware of the need to coordinate our work with other subject areas. The concern for "back to the basics" reinforces the need for continual interpretation of the role of home economics in the education of the total person.

A model for developing curriculum in home economics at the middle school level has been established. Guidelines based on this model hold promise for providing assistance to both administrators and home economics teachers in carrying out the home economics programs that will be challenging to the youth and assist them in becoming well adjusted individual and family members. □

What's new in Home Economics Education at the University of Illinois?

The Vocational Agriculture Services Unit, which has served vocational agriculture teachers since 1938, has made a small grant to the Division of Home Economics Education to pilot a program for preparing *curriculum materials for home economics teachers*. This will expand their services which until now have been only for vocational agriculture teachers. Their catalog, which is mailed free to all vocational agriculture teachers in Illinois and others who request it, will include the home economics materials in its next edition.

The Home Economics Education Division would be pleased to hear from teachers who have special requests for particular materials or materials in particular areas or for particular needs. Our work can be guided by teacher requests. The questions below are of special interest to us. Reply to Joyce Richardson, Graduate Assistant, or to Hazel Taylor Spitze, both at 351 College of Education, University of Illinois, Urbana, Illinois 61801.

In what subject area(s) are you most in need of student materials?

Do you most need materials for larger groups, small groups, or individual study?

Do you most need materials for gifted, average, or slower readers?

What type of format would be most useful?

Do you need new ideas for teaching techniques that involve students and increase motivation?

EXPLORATION OF HOME ECONOMICS RELATED OCCUPATIONS IN CLOTHING

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In the majority of school curricula where home economics subjects are taught, clothing construction is generally one of the offerings and the focus is usually on creating personal garments or items for family members. Courses which deal with clothing selection, construction, care, repair and alteration appear to be areas designated as exclusively home economics subject matter areas. Therefore, it seems appropriate to enlarge these home economics courses in ways that acquaint students with entry level jobs, technical jobs, supervisory, management and other advanced level occupations and careers for men and women in the clothing industry and other closely related avenues of employment.

Ideas concerning ways in which teachers can implement job and career exploration by students follow. Exploration of jobs and careers related to clothing is a topic that could be introduced for individuals or small groups of students who complete sewing projects more rapidly than others. Surveys of alteration services often indicate a lack of such services in many communities, and it is surprising to students to discover the fees charged for clothing care and alteration services. Also, exploration of more glamorous clothing related occupations will appeal to certain students, both male and female, and the desire to learn specific skills required for these occupations may develop.

Clothing production factories are located in many small communities. In one small town in Iowa where a factory is located, the regular home economics sewing laboratory is equipped with industrial sewing machines furnished by the factory that produces lingerie. The purpose is for students to get "the feel" of the speed involved in using industrial equipment. The hiring practice of that company is to give preference to individuals who have gained this experience.

In addition, employers seek individuals with certain types of human relations skills and personal qualities. The employer knows that a high degree of skill in the use of equipment can be gained on the job. Employers also know that employees who lack desirable human relations skills are a liability. Therefore, teachers are encouraged to help students become aware of personal qualities an employee is expected to have developed. Most instructors of home economics clothing courses can easily incorporate into certain units of instruction some learning experiences which focus on the basic human relations skills that are involved in securing a job and succeeding in the world of work.

In another school a simulated factory sewing experience for students was arranged. The unit of instruction created awareness of physical demands, emotional frustrations of assembly line jobs which require team work and also the feeling of satisfaction for those who produced a certain number of salable items. In addition, the students quickly realized one of the possible reasons why garments produced by rapid assembly line methods of construction may have poor aesthetic qualities. They concluded that consumers should expect to pay more for aesthetically pleasing garments which require extra time for the worker to match the plaids, stripes or other detail in the fabric. The students recognized that "loafing on the job" would result in a smaller pay check in situations where wages are determined by the number of items the employee has stitched satisfactorily, rather than by just being on the job the required number of hours per day. These and other outcomes of the simulated factory sewing experience were affective in nature and appeared to be worthwhile learnings for these students.

The short instructional unit which yielded these and other important outcomes was titled: Introduction to Careers in the Fashion Industry: A Five Lesson Unit Plan. The unit involved three sections of a 9th grade home economics class in an assembly line sewing experience. The five lesson plans and illustrations of the students at work follow (see pages 86 to 89).

Sandra Plumb, a student teacher, provided a simulated factory assembly line sewing experience for a career education unit.

INTRODUCTION TO CAREERS IN THE FASHION INDUSTRY
A Five-Lesson Unit Plan

LESSON #1

Topic: The Existence of the Fashion Industry and Its Importance to the Economy

GENERALIZATIONS:

A large network of inter-related industries work together to create the fashion industry.

An individual uses clothing as a cue in forming impressions of others. Clothing is a means of communicating role.

BEHAVIORAL OBJECTIVES:

Upon completion of the lesson the student will

- Be aware of fashion and its influence on clothing.
- Be able to analyze why one may choose to wear the clothing s/he wears.
- Be able to detect the roles depicted by the clothing worn by others.

MATERIALS NEEDED:

- Filmstrip
- Cassette Taped commentary
- Film viewer
- Cassette player
- Magazine pictures

LEARNING ACTIVITIES:

1. View filmstrip—"Who Needs Fashion?"
2. Discuss filmstrip content
   - What were some talents and skills needed by people who work in the fashion industry?
3. Group work
   - Give each group a picture to analyze and ask what they can determine about the people in it such as lifestyle, values, priorities, what type of work they do and how they spend leisure time.
4. Discuss what "clothes clues" students present and what clothing says about a person.

LESSON #2

Topic: Another Look Into the Areas of Design, Merchandising and Retailing

GENERALIZATION:

The Fashion Industry offers career opportunities in design, production, merchandising and retailing.

BEHAVIORIAL OBJECTIVES:

Upon completion of the lesson the student will be able to

- List some of the responsibilities associated with jobs in each of the three areas.
- Define the words design, merchandising, and retailing.
- Recognize and list several of today's fashion designers.

LEARNING ACTIVITIES:

1. View filmstrips—"Careers in Design and Merchandising" and "Careers in Retailing."
2. Group work focused on the three areas
   Assignment for Group 1
   - Define design.
   - What kinds of things have to be designed?
   - Find picture examples of the work of

MATERIALS NEEDED:
- Filmstrips
- Cassette taped commentary
- Film viewer
- Cassette player
- Dictionaries
- Fashion magazines
- Telephone books
- Newspapers

five designers and describe their items.
- Tell where you found the pictures.
- Explain who you think would wear these items.
- Find one example of lounge-wear, sports-wear and evening wear by three of the designers.

Assignment for Group 2
- Define merchandising.
- What are some responsibilities of the merchandiser?
- What are some different types of merchandise found in specialty shops and department stores?
- Are there differences in quality, price, brands, packaging of merchandise in specialty shops and other stores? Why? What are they?

Assignment Group 3
- What is retailing?
- Make a list of at least 20 stores in the community that carry fashion merchandise.
- In the filmstrip, we followed a fabric buyer, Barbara Queer. What were some of her responsibilities as a buyer?
- Look in the newspaper for an advertisement of a job in retailing.
- Tell where it is and what the qualifications are for the job.

3. Each group present a brief report to other students in the class.

LESSON #3

Topic: How Ready-to-Wear Garment Production Differs from Home Sewing

GENERALIZATION:

Appearance and durability of a garment depends upon the accuracy and detail of the planning and the workmanship in the construction.

BEHAVIORAL OBJECTIVES:

Upon completion of the lesson the student will be able to
- Analyze a garment to determine the quality of workmanship.
- Identify advantages and disadvantages of ready-to-wear and home-constructed garments.
- Define the terms piece work and mass production.

MATERIALS NEEDED:
- Ready-to-wear garments, including items made of plaid and print fabric designs and with different types of seams and finishes.
- Home-constructed garments or garments made at school.

LEARNING ACTIVITIES:

1. Distribute garments for students to examine and analyze the construction.
2. Discuss differences in construction of store-bought and home-constructed garments.
3. Prepare for an assembly line mass production sewing experience.
   - Identify jobs required to produce a gym bag.
   - List materials needed for each job.
   - List equipment needed for each work station.
   - Select jobs for assembly line.
   - Students take seats at their work stations (see list of jobs and materials needed).
   - In sequential order of the assembly

line jobs, each student explain what s/he will do tomorrow and to whom the bag is to be given for the next process of the production.

Students perform production jobs as: pressers, cutters, casing markers, machine operators and other typical factory jobs.

LESSON #4

Topic: Mass Production of a Gym Bag—A Simulated Factory Setting

GENERALIZATION:

Appearance and durability of a gym bag depends upon the accuracy and detail of the planning and the workmanship in the construction.

BEHAVIORAL OBJECTIVES:

Upon completion of the lesson the student will
- be aware of the complexities of mass production, and
- be able to identify problems encountered when several people must work on the same garment within a limited amount of time.

LEARNING ACTIVITIES:

1. Students take their places at the assigned work stations.
2. In sequential order, each student performs the assigned job.
3. One student may serve as a manager and one or more may serve as "runners" to supply construction workers with materials and deliver unfinished parts of the product to those engaged in construction processes.

LESSON #5

Topic: Evaluation of a Mass Production Sewing Experience

GENERALIZATION:

Speed and team work skills affect one's income when it is dependent upon piece work sewing.

BEHAVIORAL OBJECTIVES:

Upon completion of the lesson the student will be able to
- identify salable gym bags,
- estimate the retail price for a gym bag, based on cost of production,
- name four jobs in mass production of garments that s/he was previously unaware of, and
- explain some of the ways the three areas of the fashion industry are interrelated.

LEARNING ACTIVITIES:

1. Examine completed gym bags and select those that meet sales standards.
2. Write answers to a questionnaire that solicits this information.
   - What was your major job on the assembly line?
   - Did you have any problems? If so, were these due to *your* mistakes or someone else's mistakes earlier in the line?

MATERIALS NEEDED:
- Copies of questionnaire
- Completed gym bags

- What is one thing you learned from working on the mass production line yesterday?
- We have a merchandising problem to figure out. Our factory produced 65 gym bags, but we don't know how much to charge for them. The cost of supplies were: fabric $25.00, rope $10.00, thread $2.50, baggies for packaging $1.50, and pins $1.00. How much should we charge per bag?
- Justify your answer

3. Identify the terms below:

mass production	material
sewing machine	pattern
seamstresses	runners
cooperation	pencils
seam ripper	needles
rope threaders	scissors
trimmers	rulers
pinners	rope
cutters	thread
folders	you
manager	irons
gym bag	fun
pressers	pins
baggers	

Students examine completed gym bags according to standards for a salable product.

RESOURCES

Careers in the Fashion Industry—A Career Education Curriculum Package, Butterick Publising Company, 161 Sixth Avenue, New York, New York 10013. This package includes eight filmstrips with tape recorded commentary, 8 to 12 minutes each and a teacher's guide. 1975.

Everybody Guesses by Mildred Luckhardt. Ginn and Company, 191 Spring Street, Lexington, Massachusetts 02173. A paperback book which includes information about consumerism, psychological aspects of clothing and jobs, written in a style appropriate for junior and senior high school students. 170 pages. 1974.

Incorporating Career/Occupational Components Into Home Economics Courses by Ruth Hughes, Glenda Crawford, Colleen Caputo and Betty Stout. Home Economics Education Department, College of Home Economics, Iowa State University, Ames, Iowa 50011. Content is the description of various procedures to incorporate education for employment into the home economics program for secondary school students. 1975.

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PARENT EDUCATION: An Overview

The term "parent education" is used extensively today, but the meaning varies widely. Educational programs for parents have existed as far back as we have records. During the twentieth century, there has been an acclerated effort to use educational techniques to effect change in parent role performance, thus helping parents become more competent in rearing their children.[1] For the past several decades, this educational effort, in its many forms, has been referred to as "parent education."

WHO NEEDS PARENT EDUCATION?

Parents, as the first educators of their children,[2] support the family's main task of socializing its children.[3] Yet, parenthood is a state for which most people have little preparation.[4] Although many parents indicate a lack of knowledge in the area of parenting and are eager to engage in various educational activities, others feel that parenting is a private matter and are reluctant to seek "help." In fact, some parents feel that to ask for help would be to relinquish one's independence and to admit failure at a task (parenting) which is "as natural as sex." Reluctance to seek help in parenting may well be a part of our abhorrence of emotional and psychological problems. To some, parenting problems may be equated with emotional problems in the parent, in the child, or in the family constellation.

The parental attitude of independence with reluctance to seek help is supported by our legal system which essentially gives parents the right to do as they like with their children.[5] However, progress within our government has resulted in laws which guarantee children some rights. Laws have been passed which guarantee children an education and protect them from labor abuse. Juvenile courts have been established to protect children's interests. Court rulings have indicated that parents have duties and responsibilities in rearing their children, and when these duties and responsibilities are grossly violated, parental rights are forfeited to the state.

Given the independence parents have in rearing their children, it becomes very important to provide educational opportunities for them to become better parents. Yet many parents object to any kind of parent education. A recent response to a questionnaire which I mailed to a parent seems to sum up the way some parents feel about parent education: "Pure bunk."

Derogatory statements and negative attitudes should not cause us to stop in our efforts nor to think there is no need for parent education. Instead, they should cause us to examine again our goals, our approaches, our style, our content, our methods, and our assumptions. In general, *parents want to improve their parenting,* no matter what they say!![6] Most parents have been bombarded with so much advice they may have given up trying to unravel the relevant parts and in so doing, have rejected all advice. However, many parents may be left with a tremendous sense of guilt in not being able to do what the experts have advised.

It is ironic that while the family's role is to socialize children, few people understand or are prepared for the parental role. We spend a great deal of time, energy, and money educating persons to teach our children in school. Skillful teachers are aware of children's learning processes and of learning potential. Their task is to provide children with stimulating environments and to guide children's endless energy toward positive growth. It seems obvious that parents could improve their parenting by being aware of growth and learning processes

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[1]Orville G. Brim, Jr., *Education for Child Rearing* (New York: The Free Press, 1965).

[2]National Advisory Council on Adult Education, Position Paper, *The Roles and Responsibilities of Adult Education within Parent Early Childhood Education* (Washington, D.C., October, 1975).

[3]Evelyn Pickarts and Jean Fargo, *Parent Education. Toward Parental Competence* (New York: Meredith Corporation, 1971).

[4]Jean D. Dickerscheid and Sue Vartuli, "Child-rearing Information . . . What Do Rural Ohio Parents Want to Know?" *Ohio Report on Research and Development,* 59 (1974), 12-14.

[5]Brian Fraser, "Rights of Children" (speech given at "The Changing Family III" conference in Iowa City, Iowa, February 9, 1974).

[6]Mary B. Lane, *Education for Parenting* (Washington, D.C.: National Association for the Education of Young Children, 1975).

and by practicing parenting skills so they, like the teachers at school, could be competent and effective in their children's lives.

It appears then that almost all people agree that parents are very important in the child's growth and development and that they are the child's first educators. Pickarts and Fargo[7] sum up the parental role well:

> Whether we study physical growth, personality patterns, social behavior, or value systems; whether we are concerned with the impact of poverty or the effects of affluence; we see human ability as a social product that gets its start, for better or worse, in the environment parents provide (p. 5).

WHAT FORM WILL PARENT EDUCATION TAKE?

In the past, parent education has been rather narrowly defined, oftentimes within the context of parent groups, particularly groups associated with early education (i.e., nursery school or day care) or the church. However, parent education today takes much broader forms. In looking at the forms of parent education, we need to look at both content and method.

Content

Much subject matter may be included in parent education, even though various researchers and parent educators include or exclude widely differing areas. For example, most people would include guidance techniques as a legitimate topic, but many would exclude management techniques, arguing that management is not an area directly related to parenting. Those who include management, however, argue that it is so basic to being a good parent, especially in modern USA, that unless one can manage time, energy, and other resources, parenting will fail.

Brim[8] places the content of parent education into two broad categories: (1) advice to parents and (2) child development norms. Within either of these broad categories, there are still many choices for content. To give advice, one must advise in some area (e.g., moral behavior, peer interactions, physical growth, intellectual development). Child development norms are also available for these areas. Norms may be given for age groups (i.e., infants, toddlers, preschoolers, school-age children, adolescents, young adults) or for topical areas of development (i.e., social, emotional, physical, intellectual).

One method for determining program content is via parental need. To determine parent needs, Dickerscheid and Vartuli[9] asked Ohio parents about their needs as parents and found that mothers were most interested in information about children's sexual growth and self-control, developing their children's imagination, helping siblings get along together, and handling fights.

In the final analysis, content is dependent on the purposes and directions of parent education programs. The ultimate purpose of parent education is to produce happy, healthy children and responsible, self-directed, decision-making adults. However, the specific purposes may vary according to societal definitions of what is important for parents and children (e.g., to effect change in parent role performance;[10] to improve parental decision-making processes; to help parents formulate their own design for child rearing[11]). Brim[12] points to clear shifts in parent education aims over time, from concern over moral characteristics, to physical health, to psychological factors. An example of a current trend in parent education programs is the use of values clarification techniques to help parents to clarify values and to choose from alternatives within their values framework. In our country today, there is little consensus on values in parenting. In addition, there are fewer built-in supports for parenting (e.g., the extended family) than in the past, and what to do as a parent is no longer a clear-cut logical determinant of deeply held beliefs.

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[7]Pickarts and Fargo, *op. cit.*, p. 5.
[8]Brim, *op. cit.*
[9]Dickerscheid and Vartuli, *op. cit.*
[10]Brim, *op. cit.*
[11]Ronald L. Pitzer, "Some Guidelines for Planning Programs in Parent Education" (unpublished Extension Family Development Program, University of Minnesota, St. Paul).
[12]Brim, *op. cit.*

Method

Even though parent groups may be the oldest form of parent education, the study groups of a century ago were quite different from the parent groups of today. A parent group may incorporate most of the educational methods in use. The members of the group may discuss a book, view a film, hear a lecture, see a play, or discuss an idea or problem of a group member. A parent education program may develop around the group concept. For example, the Continuous Parent Education Program "operates through small informal study-discussion groups meeting in the homes of members or at a convenient central meeting place. . . . Each group (is) flexible, having the freedom to select the topics tailored to suit the needs of their members."[13]

Parent groups are most often associated with organized groups of young children. Parents with children in the infant-preschool age bracket appear to be more inclined to group participation. However, recently, groups have formed in relation to school-age children. For example, the City-Wide PTA in Ames, Iowa, set up a Parenting Education Committee in 1975-76 and is coordinating and implementing Parenting Education offerings in the community. Because Ames is a rather small city, the programs and activities offered are city-wide rather than confined to one neighborhood. Thus, a larger variety of activities can be planned for the city-wide community.

While the major advantage of parent groups has to do with immediate input by members and responses from other members and leaders, difficulties result from poor leadership, diverse philosophies about how a group should be run, and dealing with personalities who impede group processes. Furthermore, if parent groups are small, this can be a very expensive method of parent education. Even in large groups (100 or more members), the financial costs are still great.

A second method of parent education involves mass media. The most popular forms of mass media used for parent education are television, radio, books, magazines, newspapers, and pamphlets. Mass media play an extremely important role in the lives of most people in our country. News, fads, and commercial products bombard us and the transmission of information is usually immediate. As a result, parent educators see the value of using mass media in parent education. One of the negative characteristics of mass media is that the individual has, unlike in group meetings, no way for immediate input and feedback. Neither does the educator have a chance to clarify, explain, or expand a point. The obvious outstanding positive characteristics of mass media are the large number of people reached, the immediacy of reaching them, and the low expense per capita. Since we have available to us many forms of mass media which are acceptable to the vast majority of people, it seems appropriate to use this resource to its greatest advantage to educate parents.

WHO WILL BE EDUCATED?

Traditionally, parent education has been for parents. From its earliest inception, there has been an implicit assumption that those educated will be parents. Brim[14] begins his chapter entitled "Clientele of Parent Education" as follows: "With our consideration of the assumptions and aims of parent education now completed, it is possible to analyze the program of who are, and who should be, the parents who participate in education programs" (p. 114). This trend is further exemplified in a University of Minnesota Cooperative Extension publication "Some Guidelines for Planning Programs for Parent Education":[15]

> The developmental orientation to the family would suggest that the "teachable moment" for parent education does not occur until the married couple are actually parents. Thus, most persons are not motivated to participate in programs of parent education until after they have completed their formal education. If this is true high schools and colleges can play only a minor role in parenthood education. The main burden of parent education falls on adult education agencies, such as PTA, the Cooperative Extension Service, churches, social work agencies, adult education centers, and the mass media (pp. 2-3).

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[13] *Continuous Parent Education Program* (brochure by CPEP, Inc., 9700 Oakland Avenue, S., Bloomington, Minn.).

[14] Brim, *op. cit.*, p. 114.

[15] Pitzer, *op. cit.*, pp. 2-3.

However, many persons are beginning to advocate education for parenting before parenthood. One such advocate is Dr. Burton White[16] who has carried out extensive research on the conditions of optimal growth and development for children. His research into the role of experience on competency development in the first six years of life reflects his particular concern for how adults can structure early experience so children develop optimally. From this research, he believes that persons who are competent at parenting produce more competent children. In addition, White believes that for most parents, preparation is required; being a good parent does not come naturally. Since parents, by definition, have children already, they may not have time and energy for parent education. Furthermore, the parent may wait a while, until some problem develops before seeking help through parent education. Since the first few years of a child's life are so very important, it would be advantageous to prevent the problem rather than to correct it. White feels that instruction should come earlier and that our current educational policy needs to be revised to include parent education in public education.

If students are to be given education for parenting prior to matriculation from secondary school, then higher education will need to be sure that graduates are prepared to teach in this area. Historically, teachers of home economics curricula in the junior and senior high schools have received less instruction in the child/human development area in their own preparation for teaching than in other areas of home economics. Many receive no formal approach to parent education. Once curriculum plans are made to include parent education in secondary programs, local teachers will need inservice education in order to do an adequate job of teaching this highly important area.

A second problem related to inclusion of parent education in the curriculum of secondary education is related to home economics as a vocational rather than a college-tract course of study in many schools. Education for parenting needs to be a part of the curriculum of all students, both those planning to attend college and those planning for immediate employment. Parenting education needs to be part of the core offerings. In fact, due to the dropout rate at about age 16, education for parenting needs to be introduced early in secondary education to include those who dropout before their senior year.

A third potential problem is related to a trend in the past for boys to avoid taking home economics. Education for parenting is equally important for both males and females, particularly at the secondary school level. With more dual-employment and single-parent families, and with information on the importance of the child's total environment, we must educate boys and girls and men and women for parenting.

SUMMARY

Parent education is a topic of increasing concern. Both professionals and parents are involved in helping parents with a task which has become gigantic in an increasingly complex society. It is felt that most people need some help with parenting, in one area or another.

Parent education is a diverse area. One might include in it whatever would help people to be better parents. Both the content and methods for relaying the content vary. While parents were formerly the only focus of concern, target groups now include students of secondary education with more and more people advocating the inclusion of parent education in the secondary school curriculum. Accompanying this trend are a number of problems including the staffing of courses as well as reaching all students (vocationally and nonvocationally oriented; dropouts; male and female).

Parent education is an area rich with possibilities for curriculum planning in home economics. If teachers of home economics meet this challenge, they can contribute to the competency of the American parent and in turn to the future citizens of this country. □

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[16]Burton L. White and Jean C. Watts, *Experience and Environment. Volume 1* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973).

IDENTIFYING ADULT LEARNER NEEDS

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Home Economists have long recognized that one of the keys to offering meaningful and successful adult education programs is the ability to identify and respond to the needs of adult learners. Most adults are voluntary learners and usually participate when they feel the program will help them in some way and when it is worth their time and involvement. A needs assessment is essential to assure that the planned program is important to the people and will bring about the changes which are felt necessary.

WHAT IS A NEED?

The confusion, controversy, and debate over what constitutes a need has been one source of perplexity for adult educators. Leagans[1] noted that the word "need" is a simple and innocent appearing four-letter word, but is probably the most complex, basically significant, and far-reaching in its implications of all major terms in the vocabulary of the adult educator. An understanding of the concept of need is basic for devising ways for making relevant needs assessments. The assessor should have a clear idea of what it is that he wants to evaluate.

Knowles[2] identified basic human needs as physical, growth, security, new experience, affection, and recognition. Some psychologists believe that these needs are hierarchical and that lower level needs must be fulfilled before higher needs can be dealt with effectively.

Educational needs have been defined as the "things people ought to learn for their own good, for the good of the organization, and for the good of society."[3] Felt needs, sometimes considered interests, may be regarded as that which is considered necessary by the persons concerned. They may or may not be real educational needs.[4] Leagans[5] said the difference between what is and what ought to be indicates a gap which he identified as the need. The difference between "what is" and "what ought to be" as dictated by society gives some indication of the need. Research often helps to identify "what ought to be" or "what could be."

WAYS TO ASSESS NEEDS

The easiest needs for the learner to self-diagnose are the so-called "felt" needs or interests. This may be done by survey techniques such as questionnaires, sign-up sheets for possible offerings, and meeting with representatives of different groups such as advisory councils. Other methods appropriate for identifying felt needs may include observation of people when they are free to do as they wish, looking at reports of attendance at past adult classes, and looking at local papers for the types of activities that are available in the community.

As with felt needs, clues as to what the real needs are can also be obtained from the individuals themselves. Knowles[6] indicated that projective questionnaires may get deeper and more reliable clues as to what the real needs are. Professional support services may be required to help understand real needs. Information from people in "helping" roles with indi-

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[1]Paul J. Leagans, "A Concept of Needs," *Journal of Cooperative Extension*, 2 (2) (Summer 1964), 89.
[2]Malcolm S. Knowles, *The Modern Practice of Adult Education* (New York: Association Press, 1972), pp. 81-83.
[3]*Ibid.*, p. 85.
[4]Joe S. Ellis, *The Concept of Need in Adult Education* (Bloomington, Ind.: Bureau of Studies in Adult Education, Indiana University, 1969), p. 2.
[5]Leagans, *op. cit.*, p. 92.
[6]Knowles, *op. cit.*, p. 94.

vidual families are valuable resources. Family counselors, ministers, visiting nurses, employment service interviewers, school counselors, and social workers can all be helpful.

Television as a medium to identify educational needs can sometimes be used effectively. Some of the expressed needs of the elderly were found through a "call in" televised program during which a panel of experts responded to questions.[7] This medium is especially good for reaching the elderly and low income groups who often spend large amounts of time viewing television. This could be effective for other audiences for whom television is a primary source of entertainment. Informative fliers could be distributed several days before the program along with newspaper ads and spot announcements over radio. Because many persons believe that home economics is limited to the areas of food and clothing, the advertisements, fliers and announcements can help the public become aware of the other areas offered by home economics. Catchy and attractive advertisements including pictures or sketches will help to draw attention to home economics and its various areas.

Booths in shopping areas could be set up to respond to shoppers' questions, and records could be kept of the type or category of questions asked. Radio call-in question programs could also be effective. Telephone services can also help to categorize the needs of adults by the various types of questions that are being received by the answering home economist.

Group interview is a unique method that has been used to identify the needs of young homemakers for nutrition education programs. Spindler[8] used the technique to explore the practices and attitudes of young homemakers in regard to feeding their families. Homemakers were brought together in groups of 3 to 10 for the interview. Group interviews were tape recorded. Homemakers responded to questions related to planning, shopping, convenience foods, weight problems, and other food related problems. From the interviews important considerations were brought out which could be used to try to motivate young homemakers to improve their practices in feeding families.

Knowledge and understanding of the developmental tasks of age groups can provide a base for assessing the educational needs of the adult learner.[9] The home economist who recognizes that tasks such as learning to live with a marriage partner, rearing children, and managing a home are needs of the young adult can develop assessment items related to these needs.[10] A questionnaire may include items such as:

If you were to attend an adult class, which of the following topics would be of most help to you? Please circle the degree of help you would need.

Little Help Much Help
1 2 3 4 5

1. Working out a system of responsibilities	1 2 3 4 5
2. Deciding a system of getting and spending money	1 2 3 4 5
3. Communicating ideas and feelings	1 2 3 4 5
4. Deciding whether you should have children	1 2 3 4 5
5. Finding time to do household tasks	1 2 3 4 5

In occupational education, job or task analysis is being used to identify what the worker does and what the worker needs to know as a basis for identifying his needs on the job. Job analysis is a method of analyzing activities carried on by a worker in a particular field so that a course or in-service education could be developed which would focus on the essential activities performed by the worker. For example, identifying the tasks performed by Extension Family Food Aides and the frequency of performance of these tasks could be useful to educators to indicate depth of subject matter to be taught and amount of practice needed.[11]

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[7]Elaine Brody and Stanley J. Brody, "A Ninety Minute Inquiry: The Expressed Needs of the Elderly," *The Gerontologist,* 10 (1970), 99-106.

[8]Evelyn B. Spindler, "Group Interviews as an Approach to Planning Nutrition Education for Young Homemakers," *Journal of Home Economics,* 57(5) (1965), 342-346.

[9]Robert J. Havighurst, *Developmental Tasks and Education* (3rd ed.; New York: David McKay Company, 1972), pp. 85-89.

[10]Mary Ellen Jones, "Needs of Young Married Couples Related to the Developmental Tasks" (unpublished M.S. thesis, Iowa State University, 1969), p. 44.

[11]Irene Beavers and Ruth F. Smith, "Tasks of Extension Family Food Aides: A Cluster Analysis," *Home Economics Research Journal,* 1(4) (1973), p. 245.

Assuming importance of the tasks to the objectives of the program, this analysis could be useful for indicating to the home economist important content to be taught.

McElreath[12] has indicated that the nominal group process is a technique to use to find out what adults want to know. In this process, target audience members are asked to silently list on paper critical dimensions of a general problem area of concern to the group. In a "round robin" fashion the moderator asks each member to read one of his listed items, until all items are listed on the board. Members of the group are then asked to rank and vote for the more important items. This process has been particularly successful in Wisconsin for a project which focuses on the problems of unemployment and underemployment.

The case study method could be useful to help adults identify with the problem they have but are not yet willing to admit. Cases relating to problems of clothing selection, family relationships, food preparation, money management, consumer education, and human development can provide information related to attitudes, knowledge, and skills individuals may have related to a topic. Case studies may be particularly helpful in pointing out deficiencies in human relationship skills. By having individuals respond to cases, participants can gain insight into their own needs.

USING THE NEEDS ASSESSMENT

A needs assessment can lead to a meaningful program if the data collected by one or a combination of several of the methods mentioned above are used to organize program content for a potential group. However, the information above is not enough. Some interpretation usually by an advisory council is necessary. The advisory council can help to identify what problems, concerns or deficiencies are suggested by the data. Program objectives can be identified from a list of needs and predictions of who has the needs. □

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[12]Mark P. McElreath, "How to Figure Out What Adults Want to Know," *Adult Leadership*, 24(7) (1976), pp. 232-235.

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VOLUME XX, NO. 3
January/February 1977

ILLINOIS TEACHER
OF HOME ECONOMICS

FUTURISM AND HOME ECONOMICS

FUTURISM AND NUTRITION EDUCATION

HOME ECONOMICS EDUCATION · UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

(Top row, left to right) Royston Lawson, Norma Huls, Gary Werner, Hazel Taylor Spitze
(Bottom row) Wynette Barnard, Mildred Griggs, Joyce Richardson, Carol Kautz, Judy Brun, Penny Ralston, Betti Abbas

A publication of the Division of Home Economics Education,
Department of Vocational and Technical Education,
College of Education, University of Illinois,
Urbana, Illinois 61801

Volume XX, No. 3, January/February 1977. Published five times each academic year. Subscriptions $7.50 per year, $21 for three years; Canada, $8.50 per year, $24 for three years; Foreign, $10 per year, $27 for three years. Single copies $1.75. Special $5 per year ($7 foreign) for undergraduate and graduate students when ordered by teacher educator on forms available from ILLINOIS TEACHER office.

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351 Education Building
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Urbana, Illinois 61801

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Foreword

It's time for nutrition education again at *Illinois Teacher*! We continue to have nutrition education workshops at the University of Illinois, and we like to share with you the ideas the workshoppers have for techniques and materials to make the teaching of nutrition more effective and more enjoyable for both teachers and students.

This issue will, in word and photograph, include some of what happened in the most recent workshops. The most valuable learning experiences continue to be the projects which the workshoppers assign to themselves. Mini-projects which came out of instructor assignments also had interesting results.

One workshop assignment was to "teach without a teacher," that is, to produce some kind of material by which students could learn when no teacher was present—a display in the hall trophy case, a game a student could play alone competing against "old sol," a self-teaching kit or package, or whatever the workshopper wished. Some of these are included in "Materials and Techniques That Teach Without a Teacher." Other projects are reported in "Creative Ways to Teach Nutrition" and other articles in this issue.

The members read books and journals, of course, and as they shared research reports from the *Journal of Nutrition Education,* many of them became so impressed with its value that they took out student memberships in the Society for Nutrition Education and became subscribers. They played and evaluated games and found that some are excellent teaching aids and some are worse than useless even if expensive. They looked for nutrition articles in popular magazines and newspapers and made appraisals of their soundness and usefulness for teaching. They shared "eye openers" when they found something of special significance, and they shared resources. In so doing they were reminded that the same book or bulletin is not equally useful and stimulating to all; likewise, in their own classes, they saw the need for a variety of resources on different reading levels and in different formats.

Directed by Hazel Taylor Spitze, the workshops benefitted from the consulting services of Dr. Esther L. Brown and Dr. Mary Frances Picciano-Milner, nutritionists at the University of Illinois. Workshop members included home economics teachers, health educators, dietitians, nurses, health occupations educators, elementary teachers, college teachers and graduate students in foods and nutrition, food service supervisors, Extension home economists, and others.

Not all of this issue comes from the workshops, however. The metric recipes offered by Judy Oppert came from readers in response to requests in earlier issues. Some of the articles were received by the editor from teacher educators and home economists in various programs around the country.

Two articles will be of special interest to the college teacher of nutrition although they contain ideas for other teachers as well: Weis, Bellanti, and Korkus stress affective as well as cognitive objectives in describing their "Foodservice Workshop" and Singleton involves students as peer teachers in "Promoting Interest in Nutrition Among College Students."

Elementary teachers will find ideas in articles by Schmidt and Garton, and they may adapt some of the other workshoppers' projects for use with young children.

High school teachers will find suggestions throughout the issue and may be interested to compare their own teaching program in nutrition with that of Griffin and others.

The FDA Mini-Lessons mentioned in this issue may be useful to teachers at several levels.

The editor and contributors hope that many good nutrition educators will become even better ones as they try out and adapt ideas from this issue of *Illinois Teacher* and that they will experience new levels of enthusiasm and effectiveness as they develop, cautiously, some techniques of their own.

—*HTS*

FUTURISM AND NUTRITION EDUCATION

Hazel Taylor Spitze

Nutrition educators may have two futures to think about as they plan ahead, a near future and a more distant one. The near future, i.e., the next several years or perhaps a few decades, may be an extension of the present with trends in this country toward

more highly processed foods,
more fabricated foods,
more meals eaten away from home,
fewer meals and more "snacks" eaten,
an emphasis on meat in the diet, and
a rather sweet, fatty, and salty diet.

The more distant future could be a still further extension of the same, or it could be quite different, depending upon what we do in the near future. If we continue to "use up" our environment at the present rate and if our population increases, worldwide, as it has been increasing recently, our problems may be very different. We might then see

more dependence upon plant foods
less energy available for processing and fabricating foods
more home gardens
more home preservation of foods
simpler foods available for snacks, perhaps with less fat, sugar, and salt

If the shortage of energy resources should become very severe, we might eat more meals in establishments away from home since less energy would be required for mass feeding. Of course, the energy required to get to the mass "feeding stations," whether public or private, plain or fancy, would affect such a trend. Location within walking distance might be essential. Or, eating places might have to be located where people work and might have to offer breakfast, lunch, and carry-out service for the evening meal. Alternatively, we might find ways to use the same fuel to heat our homes and cook our food as we did earlier in this century in this country and as many people in the world still do.

If health problems such as colonic cancer continue to increase and if research establishes firmly that diet is a primary cause, this, too, could alter eating patterns. New research may also reveal that diet is a factor in mental illness and increase our knowledge of its effect on heart disease.

Some of these projections may seem pessimistic. We might also project that our society, through governmental agencies such as the Food and Drug Administration, will monitor the nutritive value of our food supply even better than is true at present, that processing and fabrication will increase the nutritive value of our food and change its palatability in a positive way, that our population will be better nourished because of new knowledge and public control.

Futurologists at the Hudson Institute predicted a few years ago "one hundred technical innovations very likely in the last third of the twentieth century." Of these, the following have some relation to nutrition, our food supply, food marketing, or the size of the population which will have to divide up the food supply.

Relatively effective appetite and weight control
New and useful plant and animal species
New or improved uses of the oceans for controlled 'farming'
Some control of weather and/or climate
New techniques for very cheap, convenient, and reliable birth control
Generally acceptable and competitive synthetic foods and beverages
Physically nonharmful methods of overindulging
Automated grocery and department stores
Extensive genetic control for plants and animals.[1]

[1]Herman Kahn, Anthony J. Wiener, *et al.*, *The Year 2000, a Framework for Speculating About the Next 33 Years* (New York: Macmillan, 1967), pp. 51-55.

What effect can nutrition education have on the likelihood that any item on the above list will come to pass? What effect can any of the predicted changes have on the need for nutrition education or the kind of nutrition education to emphasize?

The more each person becomes responsible for his/her own dietary choices, the more knowledge of nutrition will be needed. The more foods of a low nutritive value that become available, the harder will be the choices. The more dependent we become on plant foods, the more we need to understand the advantages and disadvantages of a vegetarian diet. The less energy we have for preparing and processing food, the more we need to know about the relative values of plain, simple, "natural," uncooked foods and those which are more highly processed.

It may become increasingly important for us to teach concepts and relationships such as

protein complementarity
nutrient density
fiber and intestinal activity
food processing and nutrient loss
fortification
additives.

Regardless of what may happen in that uncertain, more distant future, we have to deal now with the present and the near future and to recognize what effect our next decisions will have on the more distant ones. If Americans are going to continue to emphasize meat in their diets, nutrition educators in this country have an obligation to teach the negative effects of excess amounts of protein in the diet, the money cost of meat as a source of protein in relation to other sources, the societal cost (in terms of land, labor, and capital) of high meat production, the fat content of meats and the relation to weight control and heart disease, the low fiber content of meats and the possible relation to diseases of the colon, the absence of vitamins A and C in meats (except liver), and the like, along with its positive benefits in terms of content of iron, B-complex vitamins, trace minerals, and protein.

If Americans are going to eat more and more snacks, highly processed, and fabricated foods, nutrition educators should make their students and the public aware of the trace elements that are *not* usually added to these foods, the possibility of nutrient imbalances created by eating considerable amounts of foods high in salt, iodine, phosphorus, etc., and none of some of the other essential nutrients; and the nutrients that are usually lost or greatly reduced in processing.

If Americans continue to eat meals away from home with increasing frequency, consumers need to be able to analyze the nutritive values of "fast foods," to select a nutritious meal from a restaurant or cafeteria menu, to pick up a balanced lunch from a grocery store for a quick picnic, and to know the difference in nutritive value of the items they find in the vending machines.

How are these needs for nutrition education different from what is now being taught? Are there any problems associated with the usual emphasis on the Basic Four Food Groups as a "guide to good eating"? There are four changes I would like to see in relation to this approach.

(1) I think an educator's job is to teach principles, i.e., general factual relationships between concepts. Since "Eat the Basic Four" is a command or prescription of behavior rather than a principle, I would like to shift the emphasis to the principle that *diet affects health* and help learners discover which foods in their diet are most likely to promote health and why.

(2) I think when we speak about the "bread and cereal group," we ought to make very clear (a) that refined, unenriched grain products provide little but energy for the body, (b) that enriched products have been restored to whole grain levels in only four nutrients, and (c) that whole grain products have several other important nutrients and fiber.

(3) I think we ought to teach that there is considerable variation within the "fruit and vegetable group" which we think of especially as sources of vitamins A and C. *Some* fruits and *some* vegetables have significant amounts of vitamin A *or* vitamin C, and some have *both* vitamins A and C, *but* some have very little of either one. Consumers need to know what the exceptions are and that if a variety is eaten each week they are more likely to obtain the trace elements they need along with the "leader nutrients." They need to know that some fruits and vegetables are valuable for other vitamins and minerals and for fiber as well.

(4) I think we should stop talking about the "meat group" and refer instead to the "legume, egg, and meat group." (It is as reasonable to call these foods the "bean group" as the

"meat group" if we wish to abbreviate to one word. Perhaps we could make a strong point about the nutritive values in legumes if we referred to meat as a bean substitute!) When speaking about substitutes or alternates for meat, we ought to make clear that if cheese (or other milk product) is used, the high quality protein is present but iron and some of the vitamins supplied by the legume, egg, and meat group are not, although certain other nutrients, especially calcium, are supplied in greater amounts. We ought also to teach that the biological value of the protein in eggs and milk products is higher than that of meat and that certain combinations of legumes and grain products are equal to meat in the biological value of their protein.

Perhaps a fifth caution should be added. Since consumers think of dairy products as the "milk group," we should make sure that they understand that the dairy *fats* (butter and cream) are not in this group.

Any time that we are teaching about the "servings needed" in a balanced diet, we must be certain that the learners know what is a standard serving of the various kinds of foods. Questions such as the following might help to clarify this concept.

(1) Does a "chef salad" contain a serving of meat?
(2) Does a chunk of lettuce with French dressing constitute a serving of vegetables?
(3) Does a slice of pizza have a serving of cheese?
(4) How many standard servings of meat are there in an average T-bone steak?
(5) Is a cup of tomato soup a serving of vegetables?
(6) Is a piece of apple pie a serving of apples?
(7) How many French fries are equal to a potato?
(8) If one pours a little milk into coffee three times a day, does s/he have a serving of milk? How about the milk poured on cereal?
(9) Does a tuna sandwich contain a serving of meat?
(10) How many eggs constitute a serving of the "legume, egg, and meat group"?
(11) Is one slice of bread a serving? How much cereal is a serving?
(12) Does a cup of chili contain a serving of beans?
(13) Is a banana a serving? Does it matter what size it is?
(14) Is there a serving of milk in the usual "shake"?

It is, of course, very convenient for nutrition educators to have a pattern to recommend, and the simpler it is, the easier it is to get people to memorize it. (That is not to say they will use it to choose their own diet, however.) But the simpler it is, the more likely that the abbreviation of many principles into such a formula will leave wrong impressions, or be too inflexible to accommodate food preferences of many cultures and sub-cultures, or turn people off because it does not explain the reasons behind it.

We need not throw out the baby with the bath, of course. We can teach the relation between intake of "leader nutrients" and body functions, and we can explain that if we meet our RDAs for these leader nutrients by eating a *wide variety* of foods *without* any *fortification,* we are very likely to meet our needs for the many other essential nutrients, such as trace minerals, too. We can teach food sources of nutrients, and we can help students analyze the kinds of foods that provide the leader nutrients. In so doing, they can develop a pattern for a balanced diet which may be the "Basic Four." But if they arrive at their guide for food choices in this way, they will be aware of the exceptions (e.g., that liver can provide the vitamins for which the "fruit and vegetable group" is recommended, or that a cup of collard greens has as much calcium as a cup of milk), and they will understand the reasons why nutrition scientists made the recommendations in this well-known pattern. With such understanding, they are more likely to change their diet to try to meet nutrient needs and to use the pattern they have discovered as a quick way to check a meal or a day's dietary. Also, they will have experienced "the joy of discovering intellectual relationships" which Jerome Bruner reminded us many years ago is so important in learning and in motivation for continued learning.

In my recent interviews with economists and food scientists who have special interest in the problems of world food supply and world population, I have heard optimism expressed about the contribution of nutrition educators. They have pointed out that the person with knowledge of nutrition *and* the ability to teach it are going to be in greater and greater demand. That should give us all a challenge to keep upgrading ourselves in both these areas. •

CREATIVE WAYS TO TEACH NUTRITION

Some people create with paint, some with fabric, others with music or dance, and still others with poetic combinations of words. The members of the University of Illinois nutrition education workshops were creative with teaching techniques. Stimulated by class activities and each other, they chose projects which created new ways to teach nutrition, often with simulations, and, near the end of the workshop, they shared them with the class. In the following pages some of these creations will be described, and I think it will be obvious that a teacher using one of these techniques s/he has developed him/herself will be more enthusiastic than usual and more eager to see it succeed. This enthusiasim is contagious and if the students are involved, a few at a time, in planning and presenting the class activity, their ego involvement in its success will add to its effectiveness.

Vit-A-Vend

Sue Garton

Objectives: The student will identify foods which are good sources of vitamin A.
The student will relate knowledge of vitamin A food sources to personal food likes and choices, and determine whether his/her diet provides 100% RDA for vitamin A.

Content: Sources of vitamin A

Sequence: This activity would be preceded by an activity concerning the function of vitamin A in the body. It would be followed by discussion and activity relating to vitamin A storage and the possibility of excess and toxicity.

Materials needed: deck of cards with food names and pictures
reference for nutritive values[1]
"vending machine"

Instructions to teacher:
- Divide class into groups of 6 and subdivide each group into pairs.
- Provide a Vit-A-Vend board and a reference source for each pair.
- Give each pair a stack of food cards, making sure each stack has 2 foods that each supply 100% RDA, or more, of vitamin A in one serving, and several other good sources.
- Have students read "Directions for Loading of Vending Machine" and follow other instructions provided (see below), offering help as needed.
- When students have completed the activity, lead discussion to show what they have learned with questions such as: What foods are good sources of vitamin A? (Use reference to look up any not mentioned.) What can you do if you are not meeting your RDA for vitamin A? Could snacks provide vitamin A? Which ones?

[1]We used "Nutritive Values of Common Foods in Percent of RDA" from *Illinois Teacher.* $1.00 (6 or more copies 50¢ each).

Instructions to student: Can you fill each section of the Vit-A-Vend machine with foods which provide at least 100% RDA of vitamin A?

1. Read the "Directions for Loading" to help you identify foods high in vitamin A.
2. Select foods from your deck of cards which you think will provide 100% or more of the RDA for vitamin A. Two foods will provide 100% or more by themselves. Place these in sections 1 and 2. Other foods, because they contain less vitamin A, will require two or three cards to equal 100%. Place these in sections 3 and 4.
3. Check your reference book to see if the foods you have selected do, in fact, supply the stated amounts of vitamin A. If you have chosen a food (or foods) which do not supply enough vitamin A, remove them from the Vit-A-Vend card and select another. Keep trying until you have filled each section with foods which supply 100% of the RDA for vitamin A.
4. When you have filled the sections, write the foods and their % of vitamin A below.

Food	*% vitamin A*	*Food*	*% vitamin A*
______	______	______	______
______	______	______	______
______	______	______	______
______	______		

5. Compare your foods with those of the other 2 teams in your group. Which 6 foods have the highest % RDA?

Food	*%*	*Food*	*%*
______	______	______	______
______	______	______	______
______	______	______	______

6. Circle those foods above which you eat once or twice a week.
7. Compare your foods in sections 3 and 4 with those of the other teams in your group. Which of these foods do you eat daily?

Food	*%*	*Food*	*%*
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______

8. Comparing your knowledge about sources of vitamin A and your food likes and choices, where would you place yourself on the line below?

Susceptible Sam avoids all vitamin A foods. ________________________________ Perky Pat eats 100% RDA of vitamin A.

9. How might your place on the continuum above affect your health?

____

____

____

10. I have learned that____

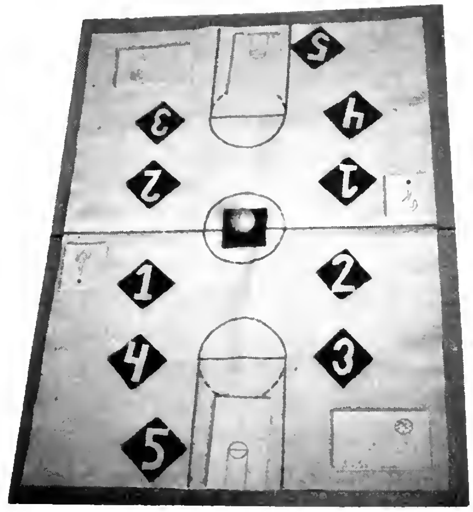
____

____

Nutrition Basketball

Actors: referees (1 in center of court and 1 on each sideline to check answers given by teams)
timekeeper (to blow whistle)
scorekeeper
players (including substitutes)
coaches (to send in substitute frequently and give all a chance to play and to teach nutrition to those on the benches to prepare them for the game)

Materials needed: "basketball court"
2 sets of questions (see below)
ping pong ball
whistle
nutrition references



Bonnie Ahlrich Wachter

Using the usual rules for basketball as much as possible the class is divided into teams and five players from each team are placed on the court (see photo above).

A referee (could be the teacher) in the center throws the ball (ping pong size may be best!) to a player and asks a question. The first team has a specified length of time (e.g., 10 seconds) for that player to answer or throw the ball to another member of his/her team for an answer. If the team answers correctly, it scores 2 points. If not, referee calls foul and the other team gets a free throw. Then the referee throws the ball to a member of the second team and play continues for a specified length of time (e.g., 10-minute "quarters"). During "time out" between quarters all players may study references provided.

Questions for Field Goals (2 points)

1. The 3 nutrients which provide body energy are ______, ______, and ______. (carbohydrates, proteins, fats)
2. R.D.A. stands for ______ ______ ______. (Recommended Dietary Allowances)
3. There is more of this mineral in the body than any other mineral. ________ (calcium)
4. Grains, and cereals made from grain, are a main source of which energy-giving nutrient? ______ (carbohydrate)
5. There are ______ essential amino acids for adults. (8)
6. Animal sources provide a (high or low) biological value protein. (high)
7. Which nutrient provides the most energy per gram? (fat)
8. The building blocks of proteins are called ______ ______. (amino acids)
9. People can go blind from not having enough of which nutrient? ______ (Vitamin A)
10. Bones are made mostly from proteins and minerals, especially which mineral? ______ (calcium)
11. Too much or too little of which of the nutrients can cause goiter? ______ (iodine)
12. Vitamin A is found especially in vegetables of which colors? (dark yellow, orange, or dark green)
13. ______ measure the amounts of energy one is able to get from the foods one eats. (calories)
14. Which of the following nutrients are soluble in water: Vitamin D, Thiamin, Vitamin A, or Vitamin K? (Thiamin)
15. Which of the following foods contain the most Vitamin C in one serving: cauliflower, beets, broccoli, or tomato juice? (broccoli)
16. Vitamin ______ is sometimes called the "Sunshine Vitamin." (D)
17. Young women need more of which nutrient than young men? (Iron)
18. The process of breaking down foods into nutrients within the body is called ______. (digestion)
19. Which of the following foods provides the highest quality protein: beans, peanuts, meats, milk, or eggs? (eggs)
20. Which food is slower to digest: fried egg or poached egg? (fried egg)

21. The most common type of anemia is caused by a shortage of the nutrient ______. (iron)
22. Why do nutritionists recommend using the water from boiled potatoes? (The potato water contain valuable nutrients.)
23. Name 6 foods that provide iron for the body. (some dried fruits, walnuts, clams, oysters, meats, eggs, dried navy beans, or lima beans, and other possibilities)
24. Carbohydrates provide the same amount of body energy per gram as ______. (protein)
25. Which one of the following vitamins dissolves in water: Vitamin A, Vitamin K, Vitamin D, Vitamin E, or Vitamin C? (C)
26. ______ ______ is the minimum need of the body for energy when at rest. (basal metabolism)
27. Difficulty to see in dim light may be caused by a lack of Vitamin ________. (A)
28. Why are great doses of Vitamin C unnecessary in the body? (because the body needs only a small amount and the extra does no good.)
29. The skin can produce Vitamin D under some circumstances if ______. (it is exposed to the sun.)
30. What happens if more protein is eaten than the body needs for growth, repair, and energy? (The excess protein is stored as fat.)
31. Which type of preservation will retain the most nutrients in vegetables over a long period of time: freezing, refrigerating, canning, dehydrating with heat? (freezing)
32. If protein is used for energy, it is not available for ______. (building new tissues or repairing the body)
33. Of the following foods, which provides a fair amount of Vitamin A? (a) Cucumber, (b) head lettuce, (c) radishes, (d) apples, (e) none of the above ([e] none of the above)
34. Which of the following nutrients is least involved in building bones and teeth: Calcium, phosphorus, Vitamin D, or Vitamin A? (Vitamin A)
35. Which of the following is not a mineral: iodine, thiamin, fluorine, or calcium? (thiamin)
36. Iron is predominantly found in the ________ blood cells of the human body. (red)
37. The process of turning food into energy within the body cell is ______. (metabolism)
38. The compounds within protein which are called the building blocks are the ______ ______. (amino acids)

Free Throw Questions (1 point)

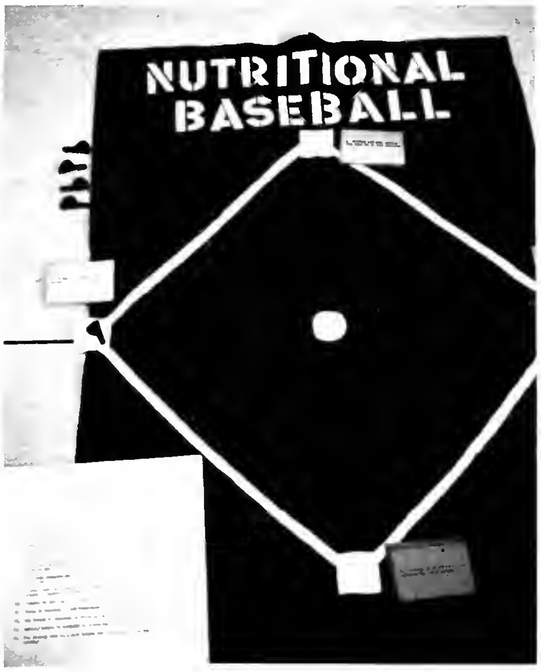
True-False

1. Vigorous activity causes increased need for protein. (F)
2. Mental retardation in a child can be caused by a very poor diet for the mother during pregnancy. (T)
3. Alcohol hinders the body's use of nutrients. (T)
4. If a child is overweight at the age of three, he is more likely to be overweight the rest of his life than if he was not overweight as a child. (T)
5. Venereal disease is caused by a shortage of Vitamin E. (F)
6. Protein is fattening. (F)
7. What a girl eats years before she becomes pregnant can affect the development of her baby when she does become pregnant. (T)
8. Mental retardation can be caused by a very poor diet in early infancy. (T)
9. Cooking in iron pans can add to the iron content in the food being cooked. (T)
10. Being on "The Pill" causes a woman to need extra amounts of some nutrients. (T)
11. Some prepared cereals have more sugar than cereal. (T)
12. Too much of some nutrients can be as bad for the body as too little. (T)
13. Being tired is one sign of anemia. (T)
14. Vitamin D, Vitamin C, and Vitamin E are all fat soluble. (F)
15. Turnips and tomatoes have substantial amounts of Vitamin C. (T)
16. Vitamin E increases sexual potency. (F)
17. Vitamin C is produced within the human body. (F)
18. All foods give us energy. (T)
19. Those who have poor diets usually recover from diseases like "flu" more slowly than people with good nutrition. (T)

20. All foods contain calories. (T)
21. Blindness can be caused by a poor diet. (T)
22. The body does not use energy while sleeping. (F)
23. Cellulose is digestible in the body. (F)
24. Vitamin pills cannot hurt you. (F)
25. Weight reduction programs require the elimination of certain foods in the diet. (F)
26. The standard serving of cooked vegetables is usually ½ cup. (T)
27. A pregnant woman needs more of most nutrients than she did before she was pregnant. (T)

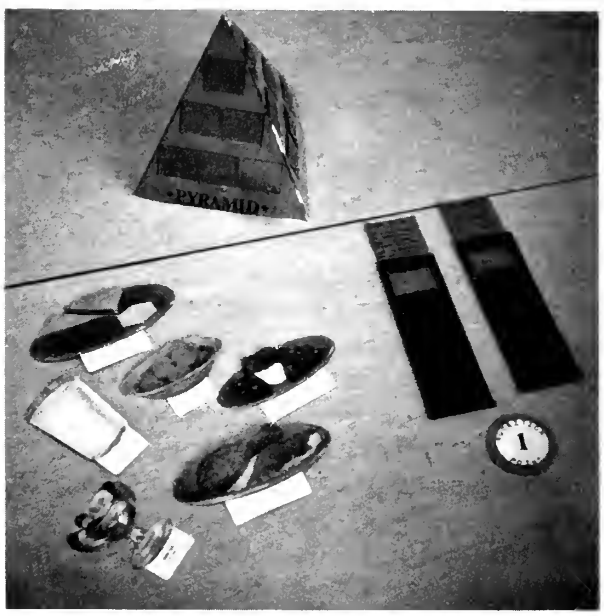
Nutrition Baseball

Caroline Barth

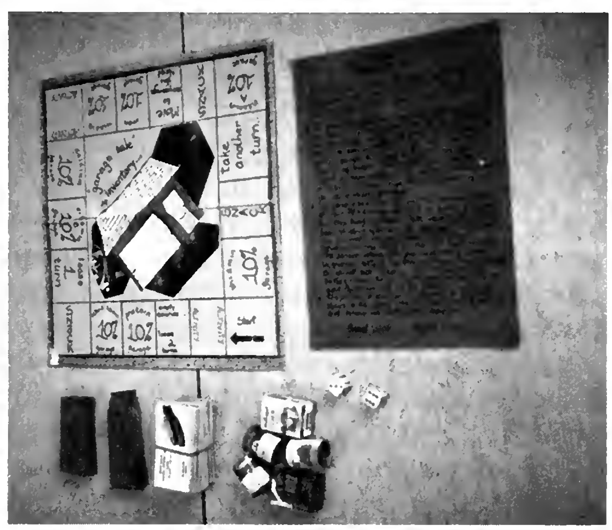


Various adaptations of the usual rules of baseball are possible. The teaching effectiveness will depend primarily on the quality of the questions. One possibility would be to have the pitcher throw the ball (ping pong again!) to the batter and ask a question. If s/he answers before the catcher, s/he proceeds to first base. (If not, s/he is out. Three outs retires the team from bat.) Then pitcher can throw ball to next batter or to first base with a question. If latter, runner must answer question before first baseperson to proceed to second base. If batter proceeds to first base while runner is there, the latter goes to second and pitcher can then throw ball and question to second base if s/he wishes. Runner is out if s/he does not answer question before second baseperson.

Number of innings and other specifications can be planned by group to fit time and circumstances. Winning team, of course, is the one with the most "runs."



Gwen Blucker used food models in her variation of the **"Pyramid" TV show.**



Carol Hamann used the **garage sale** idea for a simulation to teach nutrition.

Let's Play Nutrition

Jan Summers
Home Economics Teacher
of the Deaf
St. Louis County, Missouri

Students: The lesson plan presented below was prepared for deaf students with language and reading problems. The class of about 10 ranges in age from 14-16. It might take more than one day and parts could be repeated later to reinforce the learning.

Setting: The multipurpose classroom will be rearranged to accommodate a baseball diamond with pillows for bases and tape or chalk lines between bases. National Dairy Council Comparison Cards will be on display.

Objectives

1. The student will understand that all of the nutrients are needed simultaneously by the body.
2. The student will understand that the needed nutrients are available in a variety of foods.

Principles

1. Nutrients are interrelated in meeting body needs.
2. Foods vary in their nutrient value.
3. Having a variety of foods in the diet promotes adequate nutrition.

Teaching Techniques

1. *Discussions.* When students walk into the room, they will most likely begin to ask questions. Because there is a change in physical surroundings, students know that something is going to be different. Explain that today they are going to be learning about the members of a team and how they work together.

Ask questions about the players on a baseball team. How many are there? Who are they? What do they do? Why do you think there are so many players on a team? Can one player win the game? What would happen if a certain player was missing? In professional ball the team cannot go out to the field without all nine players so bring that up after they have discussed what changes they would make and how it would affect the working of the team.

Summarize it all by making a relationship comparison between the players of a baseball team and the nutrients in the food we eat. Just as the players are working together to win the baseball game, the nutrients work together in our bodies to win "the game of nutrition" and make us healthy.

2. *Simulation.* This is a dramatization in which the students will be reading the scripts of "Let's Play Nutrition."

Explain to the students how they will each have a part to read in the script. Each person will represent a nutrient and have a position to play on the team. Ask the students if they would like to play a certain position on the team, and give them the part of reading the nutrient that is represented by that position. Or, if certain students have specific reading problems you are aware of, suggest that they be a player that you know does not have much reading to do. Give the students time to read through the scripts for their part. Have them ask questions about any of the words they do not know. While they are reading the scripts, pin name tags on their backs, with the name of the nutrient written on the color of construction paper that corresponds with the Comparison Charts by the Dairy Council.

3. *Discussion.* As a means of follow up, after the script reading discuss what has happened during the skit and what the students' reaction is to it. Emphasize again that all of the nutrients are needed to be present together in order to work in the body.

Ask questions about different nutrients they may already be aware of in different foods. Different foods have different amounts of the nutrients in them. Point out to the students the

comparison charts that are up in the room. Show them how to read how much of a certain nutrient is in a food by percentage. Explain RDA in simple language. Emphasize the need for adequate amounts of *all* nutrients each day.

4. *Simulation.* The students are now to pretend they are the nutrients that they have played in the game. Each student will be given a piece of paper and a pencil. They are to find out which foods have a lot of their nutrient and write them down with their percent of RDA. The coach could be given the job of trying to find some foods that have a lot of the different nutrients in them. Calories may be given a different kind of job, such as finding certain foods that the students eat frequently to report on the number of calories and what nutrients are high in that food. Teacher will mingle with the students and help them discover.

5. *Discussion.* Bring the group back together when the students have found what foods contain their nutrient. Have them read the list of where they are found. Have the coach and calories report what they have found out. Teacher will write columns on the board with many good sources of each nutrient.

Ask the students if the body needs just Vitamin A foods in the body? or Protein? Compare that back to the baseball game. A team needs many different members to win, not just all pitchers or all shortstops. Ask how can we get all the nutrients we need during the day. Lead them in summarizing that different foods can be chosen to give their bodies the nutrients they need.

Evaluation

Listen to the students at all times!

During the discussion after "Let's Play Nutrition" listen to what students are saying. Reinforce the student's responses and use questions to get them involved and thinking. Listen for students to express the idea of teamwork. Summarize the discussion with the statement that all nutrients are needed to be working together in the body.

During the simulation when students are pretending that they are the different nutrients, mingle with them and note what problems they are having reading the charts and help as needed.

When students read their lists, look at the comparison cards to see if s/he has chosen the right foods. Ask them if they could form a good list of foods for a day that would have all the nutrients the body needed.

Let's Play Nutrition

The room is set up to represent a ball diamond. Move the furniture around in the room and use tape or chalk to mark off the baselines.

[*The COACH walks out and stands in the field near pitcher's mound, walking and looking around.*]

COACH—Okay, it is time to play. But, the team is not here. I hope all the nutrients come today. We need all of them to win. When all the nutrients work together, we make a winning team.

[*PROTEIN walks out and stands at home plate (catcher).*]

PROTEIN—Hi, Coach, I'm here.
COACH—Hi, Protein. You are the first nutrient that has come today. I am so happy to see you. We cannot play without you here.
PROTEIN—No, I guess we can't. I build and repair the groups of cells or tissues in the body. I help make part of the blood. That part helps the body to fight infections when it gets a cut or sore.
COACH—Yes, the body needs you. But it also needs other nutrients. Look, I see Iron coming.

[*IRON walks out to stand at first base.*]

IRON—Hi, Coach, Hi, Protein.
COACH, PROTEIN—Hi!

IRON—Where is the rest of the team?

COACH—They are not here yet. I'm sure they are on their way. I'm happy to see you here. We need you on the team. You and Protein work together in the body.

IRON—Yes, Protein and I work together to make the red part of the blood. It takes the oxygen to the cells in the body.[1] The body can't use me when protein is not here too.[2]

[*CALCIUM starts walking to second base.*]

CALCIUM—Hi, guys!

COACH—Hi, Calcium! We have been waiting for you. You are on our team. And we need you.

CALCIUM—Yes the body needs me. I help build bones and teeth. I help make them strong. I also work in the blood to help it clot. So when the body gets a cut, I help the cut to stop bleeding.

COACH—You also help the team to keep its nerves working right.

PROTEIN—You help the muscles to work right. The heart is a very important muscle, so you work there, too.

IRON—Sometimes the body works hard. You help it not to get tired fast. After the body uses the muscles, you help them get ready fast to work again.

CALCIUM—We all have jobs that the body needs. But we need to all be here in order to play the game. I see another nutrient, Vitamin A, coming.

VITAMIN A—Hi, team. I came out to help today. [*VITAMIN A walks to third base.*]

COACH—We surely need you on our team.

VITAMIN A—I help the skin to be smooth and soft. Also, I keep the inside of the nose, mouth and throat moist to fight infection. The team needs me to help see what is going on. I help keep the eyes healthy.

PROTEIN—I need you to take me apart in the body to help make bones. There is hard white tissues around the bones called cartilage. I have to be split to be able to change cartilage to bones.[3]

VITAMIN C—Hi, team, or at least part of the team. I can see that not all of the nutrients are here.

COACH—Hi, Vitamin C. We are glad to see that you are here.

[*VITAMIN C walks to shortstop position.*]

VITAMIN C—I could not let the body down. Cells need to be held together in the body. I act like glue in holding cells together.

CALCIUM—You help the body fight the infections it gets. Sometimes when the body gets a cut or broken bone, you help it to get well.

PROTEIN—You also make the walls of the veins and arteries strong for the blood to flow through.

IRON—Ascorbic Acid, when we are working at the same time, the body uses more of me.[4] So I'm really happy to see you.

VITAMIN C—Well nutrients, it's all of us working together to make a winning team.

[*THIAMIN, RIBOFLAVIN and NIACIN walk out to the field to where the COACH is.*]

COACH—I see the B vitamins are here to play. Hi, guys!

PROTEIN—Hi, Thiamin, we sure are happy to see you. You help us work together. We need everyone on our team to win.

THIAMIN—Yes, I help make the muscles and nerves work right. The pathway that the food travels through the body is called the digestive tract. I keep this pathway working right. I also help the body keep a good appetite for food. I want to be sure the body feels good all over.

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[1] *Focus on Nutrition*, Massachusetts Department of Education. Revised by the Bureau of Nutrition Education and School Food Services, J. C. Stalker, director. 1970. p. 12.

[2] *Ibid.*, p. 11.

[3] Ronald M. Deutsch, *The Family Guide to Better Food and Better Health* (Des Moines, Iowa: Meredith Corp., 1971), p. 83.

[4] Sue Rodwell Williams, *Mowry's Basic Nutrition and Diet Therapy* (5th ed.; St. Louis, Mo.: The C. V. Mosby Co., 1975), p. 42.

CALCIUM—And Riboflavin, your job is important too.

RIBOFLAVIN—I help keep the eyes healthy. I prevent cracks at the corners of the mouth, and I help change food into energy.

IRON—Niacin, without you, we couldn't play. You help us to be a team.

NIACIN—You could not play without me. I help to keep the pathway for the food in the body working right. Remember, that pathway is called the digestive tract. I also help the skin and the nerves to work right.

VITAMIN A—It's great to see how all you B vitamins work together. You change the food when it comes into the body. The food has to be changed before the body can use it for energy.

[*THIAMIN walks out to right field. RIBOFLAVIN walks out to left field. NIACIN walks out to center field.*]

VITAMIN C—Well, we only need one more player to make our team complete.

COACH—I see him coming.

[*CALORIE walks out to stand beside COACH.*]

COACH—Hi, Calorie. The nutrients surely are glad to see you here today. You are not a nutrient—but you come from three different nutrients: carbohydrates, fats, and protein. You are the measure of how much energy is in food.

CALORIE—Hi, Coach, Hi, team!

ALL NUTRIENTS—Hi!

CALORIE—It looks like we are all here and ready to play.

COACH—We were waiting for you—the body's "food energy."

THIAMIN—The body needs you to keep going.

RIBOFLAVIN—You are the measure of energy that is made when the body uses food. You are needed to keep the body going. You tell the body how much energy it has from food.

NIACIN—And we B vitamins help you come alive in the body.[5]

CALORIE—You nutrients are so important. The body needs what you nutrients give to keep it working right. We are all members of the team that works in the body.

COACH—I'm so glad to see all of my team here. You are all needed to make the body work well. You help each other to do jobs. If one of you didn't come, we couldn't play today. With this kind of a team, I'm sure we will win. Okay, "*Let's Play Nutrition.*"

ALL—Yeah, Team! Let's go!!

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[5]Ruth M. Leverton, *Choose Your Calories by the Company They Keep* (Chicago, Ill.: National Dairy Council, 1975), p. 2.

Nutrition Education for Disabled People

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Presenting nutrition information to a group of people age 16 and over who have, among them, physical, mental, emotional, and developmental disabilities can be a difficult task. To approach this problem, a curriculum was designed to present basic nutrition concepts in an atmosphere that is informal, allows individual progress, and incorporates several modes of learning.

Many disabled persons have difficulty reading. Therefore, written materials used were chosen for an approximate fourth grade reading level. Pictures, puzzles, games and transparencies are also employed. Repetition of concepts is planned, with the form of presentation varied, to encourage greater comprehension and retention. Many of the techniques aim for discovery learning. This method seems well-suited because it encourages the learner to interpret and assimilate information in terms which he can understand. Thus the discovery will be more meaningful to him. It also promotes self-esteem among those who have experienced failure with traditional methods of instruction.

Self-teaching bulletin board asks a question about each picture, then offers immediate reinforcement by checking response against answer hidden under a flap.

One of the discovery methods used is a bulletin board display titled "How Much Protein . . . ." There are seven colorful pictures of people—some young, some old, some athletic, some men, some women—each accompanied by a note card that describes the person and offers three choices of protein food combinations. The viewer is to move a stick pin to the choice he believes meets the pictured person's protein needs for a day (serving sizes and total quantity of protein for each choice are indicated). To check himself, the viewer can lift a flap on the bottom corner of the card and see the correct answer. This board can be used whenever the learner desires. It can be repeated at will until the concept that different people need different amounts of protein is generalized and internalized. More advanced learners can also study the specific amounts required. The board can be modified for use with any nutrient.

"Did You Know" this is an electric board? The white card on lower right tells how to use the pen pointer to answer the question and make the light shine!

Other methods used included an electric board that lights up when a pointer is placed on the correct answer to a true-false or multiple choice question. A dice game in the style of Yahtzee requires matching the basic food groups with the major nutrients available in that group with the major body function of those nutrients. Dairy Council Food Models are used in selecting a day's food for oneself, in studying food group divisions, in discovering major nutrient contribution of each food group. Dairy Council Comparison Cards aid in studying nutritive quality of individual foods. In miniature form they are used in card games similar to Go Fishing and Racko. A Jeopardy-type game and grocery shopping games build specific information about various foods. Some concepts are presented through self-teaching packets which the learners can complete at their own pace. Transparencies reinforce some information given in printed form.

Current use of this curriculum at a training center for the disabled has shown that the incorporation of games and informal activities is appealing to disabled people. Their attitude toward learning becomes more positive because games are not as threatening as some other types of classroom study. Their attention is also held for longer periods of time. One problem is that even fourth grade level reading materials may be too difficult for some people. An approach that introduces concepts through several media will aid in reaching very low level readers and persons with visual disabilities. It also allows variety and free choice for other learners, which seems to be the key to meaningful participation.

Survey on Acceptance of Nutritious Snacks

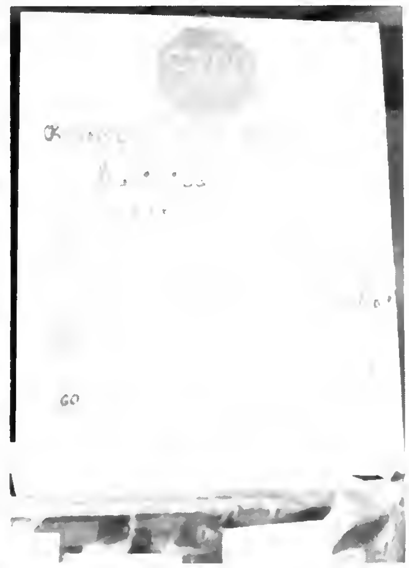
Situation: Over a period of four weeks a survey was conducted to study the snack choices of a group of working people at their morning coffee break. The subjects of the study were trainees at a training center for disabled people. Characteristics of the study group included ages ranging from 16 to 65 years; varying physical, mental and/or emotional handicaps; and incomes ranging from poverty to middle class levels. Educational backgrounds include those with no formal schooling up to those with college experience. Only a small minority of the people were known to have had any nutrition education beyond that offered by the mass media.

The objective of this survey was to discover whether these people's snack choices would change when foods were made available which had greater nutritional value than those previously offered. The morning break from work was chosen, since it is believed that many of these people eat little or no breakfast.

Procedure: To carry out this study, charts were devised which showed columns for each snack and beverage available at the morning break. During the first two weeks only the usual array of commercial snacks—candies, chips, gum, packaged brownies, popcorn—was offered. Beverages available were: coffee, tea, milk, hot chocolate, and carbonated drinks. Each purchase was recorded on the charts. No attempt was made to influence customer choices.

For the third week of the study, twenty new snacks were introduced, four each day of the work week. These snacks were chosen for high nutrient density with special emphasis on vitamins. They consisted of selected homemade cookies, muffins, and candies plus some fruit and vegetable nibblers. Peanuts and raisins were also offered. The introduction consisted simply of putting them on display alongside the familiar snacks. No influence on customer choices was attempted. Questions as to the nature of the unfamiliar foods were answered factually, without stated opinions as to nutritive value. Each purchase was recorded on the charts.

STOP and consider your snack habits. This lunch room snack counter was invaded by colored bar graphs showing nutrient content of common snacks, like potato chips, and of mysterious new snacks. The new snacks all proved more nutritious, but not necessarily more popular.



This poster headed the snack counter display of competing popular snacks and nutritious snacks.

During the fourth week the familiar snacks and the twenty new snacks, in the same cycle of four each day, were again offered. In addition, index cards showing a colored bar graph of nutrient value for eight common nutrients and calories was displayed by each food and beverage. A large poster was positioned at the beginning of the display case (see photo). This explained, in easy language, that the cards showed relative nutrient and caloric values to aid the customers in making nutritionally wise snack choices. Questions about the foods and the bar graphs were answered as fully as possible. Again, each purchase was recorded. During the last week an electric question board was displayed where anyone could use it. Questions dealt with general nutrition knowledge to encourage interest in the subject. When the right answer was chosen, a light went on.

Results: During the two weeks that the new, nutritious snacks were offered eight showed increased selection, ten showed a decrease, and two remained unchanged. These results seem to indicate that the nutrition information, as presented, did not make sufficient impact to cause significant behavior changes during the time allowed for the study.

Evaluation: These results may have been influenced by wariness toward unfamiliar items. With continued exposure some of the unfamiliarity seemed to disappear. Even so, few people were willing to risk buying an unknown snack. As time passes these items are being purchased more frequently than during the actual time of the study.

The people studied also showed a great preference for sweets. The three most popular items were two kinds of candy and oatmeal muffins—but only after the latter were frosted. Two other items which aroused considerable discussion were the fruit cup and relish plates. These attracted people trying to lose weight.

One more factor of possible influence on the results was packaging. The new snacks offered were made at the location of the study. Plates and foil-covered platters were used for

display of muffins and candies. Cookies and fruits were shown in bowls. In contrast, the candies and chips available were presented in their colorful commercially prepared packages. This situation allowed greater visual investigation of the new items, but at the same time increased the sense of difference and strangeness.

Interpretation: Consideration of this study and its limitations seems to indicate that snack choices of these people could be influenced to include more nutritious items. To be successful, the attempt would need to be adjusted to accommodate the following: a time period long enough to allow the subjects to become accustomed to the new items; packaging methods to lessen dissimilarities between commercial and locally prepared items; and more individualized techniques for presenting the accompanying nutrition information.

Application: Suggestions for maximizing change in snack choices include introducing only one or two more nutritious snacks each week. This would encourage curiosity to focus on particular items and increase familiarity. Each week a corresponding tape recording could present a short nutrition message. Use of a tape loop would allow repetition of the message as customers moved through the waiting line.

Accompanying this presentation, a variety of visual aids could be displayed. Ones which can be manipulated by the viewer may command the most attention. Further concentration on a specific item might be achieved by advertising it as the "special" of the week. Detailed information could then be presented near the item. These added approaches might make the impact necessary to bring changes in snack choices.

A variation of Tic Tac Toe by **Bonnie Ahlrich Wachter** required that nutrition questions (see below) be answered in order to get X's and O's on the board.

Answers were checked for correctness by a referee with a suitable reference source.[1]

Questions:

1. Which food below is lowest in calories?

   A. ½ cup tuna B. 2 fish sticks C. 2 eggs D. 1 weiner (B)

2. Which food below has the most protein?

   A. ½ cup peanuts B. ½ cup cottage cheese C. 2 eggs D. ½ cup kidney beans (A)

3. The least amount of protein is contained in which type of foods below?

   A. milk products B. green vegetables and fruits C. cereals and breads D. meats (B)

4. Which food below provides, in the amount shown, about enough calcium to meet a woman's RDA?

   A. 4 oz. of American cheese B. 2 glasses milk
   C. 2 tablespoons of sour cream D. 2 cups of ice cream (A)

5. More than 10 percent of the RDA for calcium is found in all but which one of the following foods?

   A. buttermilk B. ice cream C. custard pie D. cherry pie (D)

[1] We used "Nutrients in Common Foods in Percent of RDA" from *Illinois Teacher.* \$1.00 (6 or more, 50¢ each).

6. Foods which often contain high amounts of Vitamin A and Vitamin C are:

A. breads and cereals B. meats C. milk D. fruits (D)

7. An example of an "empty" calorie food is:

A. apple pie B. butter C. potato chips D. ginger ale (D)

8. Of the following foods, which one contains less than 10 percent RDA of all the 8 "leader" nutrients?

A. celery B. onion C. carrots D. turnip (A)

9. Which fruit below provides the greatest amount of nutrients?

A. apple B. raisins C. grapes D. banana (D)

10. Buttermilk is:

A. whole milk with butter in it.
B. a skim milk product, with no butter.
C. higher in calories than skim milk.
D. lower in calcium than whole milk. (B)

11. Which food below contains the most Vitamin C?

A. ½ cup broccoli B. ½ cup orange juice
C. ½ cup frozen strawberries D. ½ grapefruit (C)

12. Which product below contains the least Vitamin C?

A. 1 medium fresh tomato B. ½ cup canned tomato
C. ½ cup tomato juice D. 1 cup tomato soup (D)

13. Which food contains the most Vitamin C?

A. 1 medium fresh tomato B. ½ cup canned tomato
C. ½ cup tomato juice D. 1 cup tomato soup (A)

14. This food contains more than 100 percent of the RDA for Vitamin A. Which one is it?

A. ½ cup dark squash B. ½ cup canned apricots
C. ½ cup broccoli D. ¼ of a 5-inch cantaloupe (A)

15. Sweet potatoes have a higher percent of RDA for which nutrient below?

A. Vitamin A B. Vitamin C C. calcium D. thiamin (A)

16. Which food contains the highest percentage of the RDA for iron?

A. ½ cup spinach B. ½ cup tuna C. 3 oz. corned beef D. 2 fish sticks (C)

17. Iron content is highest in which of these foods:

A. ½ cup prune juice B. 2 eggs C. ½ cup green peas D. 3 oz. pork roast (A)

Materials and Techniques That Teach Without a Teacher

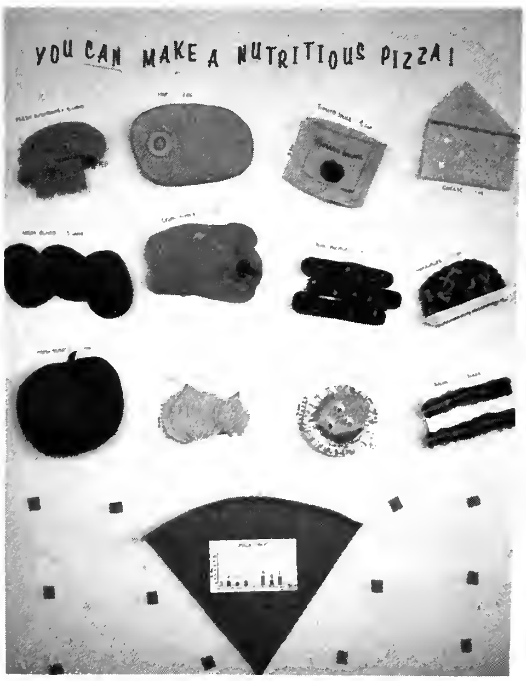
Hazel Taylor Spitze and Workshop Members

The aim of a good teacher is to make her/himself unnecessary. In order to accomplish this goal, excellent teaching is required and it often seems that one teacher per student is needed. To be available for one-to-one tutoring, a teacher must have techniques and materials that can do the teaching with the rest of his/her group while s/he works with an individual. What is needed?

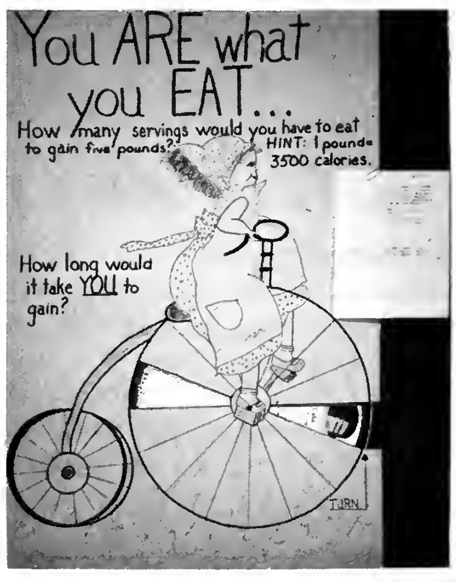
There are many possibilities for activities in which students can engage and learn without a teacher constantly present to direct them. Sometimes television, video tape, film or filmstrip can serve this need. Sometimes a teacher is fortunate enough to have an aide, a parent volunteer, or other resource person to provide an extra pair of hands, or s/he may arrange for students to teach each other.

Some educational games can "teach without a teacher" and be more than fun and diversion. Bulletin boards and other displays can also serve this function, usually teaching one or a very few concepts in a short time. Self-teaching kits, learning packages, and programmed instruction materials can occupy one student or a small group without constant supervision.

The members of the workshop were challenged to prepare examples of these materials that free them for conferences and "tutorials" with single students, and some of the results are shared below.

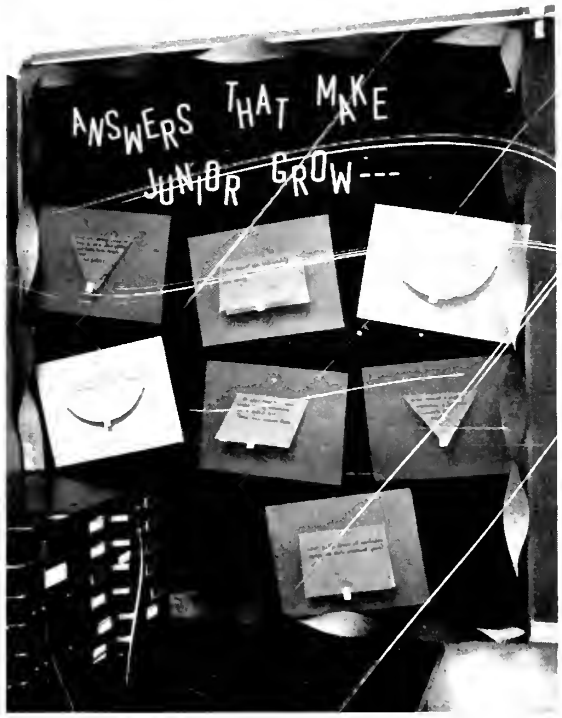


Sally Wood and **Nancy Crump** made felt mushrooms and cheese look appetizing as they showed the nutritive values of various pizzas. Pieces were movable and were stuck on the board with Velcro so the viewer could choose ingredients and see nutrient values.

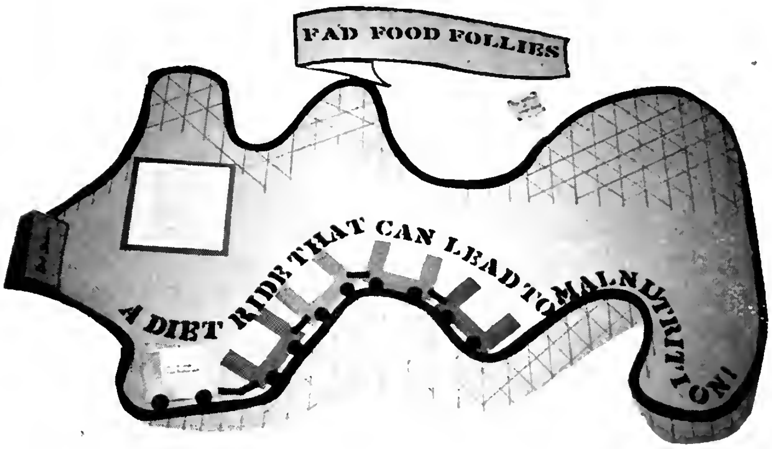


Marti Heintzman provided calorie and other nutrient information on a variety of foods as the viewer spun the bicycle wheel. Instructions attached aided the viewer's learning. The focus was on the relation of caloric values of food and human activity.

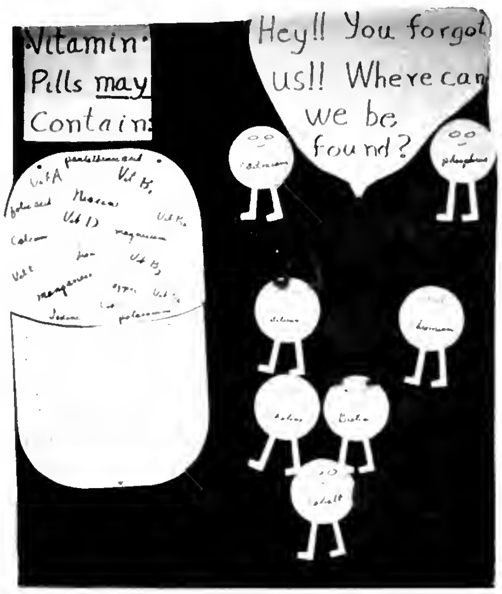
Carol Hamann's bulletin board involved the viewer in packing his/her own lunch and learning about its nutritive value.



Jane Schovanec includes nutrition in her child development class and provides a self-teaching bulletin board with questions on tabs that lift up to reveal answers.



Caroline Barth warned about fad diets with one in each railroad car and instructions to the viewer to teach about the myths and dangers.

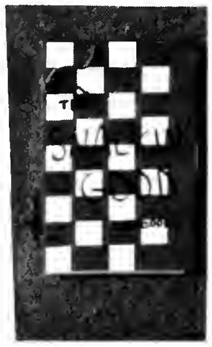


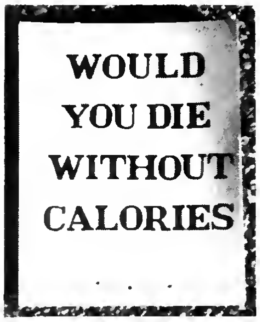
Mary Ann Block offered a caution about vitamin pills and stressed the need for trace minerals and the lesser known vitamins.

Bonnie Ahlrich Wachter's display of labels and questions helped teach nutrition labeling. The poster attracts the attention of the students with labels from canned and boxed products. On the corkboard the parts of the nutrition label are pointed out: nutrients with percentages of U.S. RDA, ingredients in decreasing order of amounts, manufacturer's address, serving size, net weight.

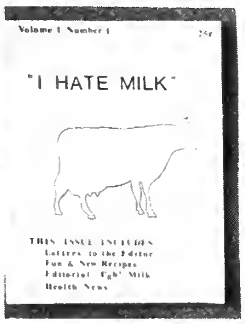
Lorraine Arling used food pictures in the railroad cars to teach sources of nutrients, and the posters below explained the reasons why each nutrient is needed by the body.

Self-teaching booklets by **Brenda Dirks** (top), **Shirley Rauh** (center), and **Paula Walker** (bottom) had a variety of objectives.



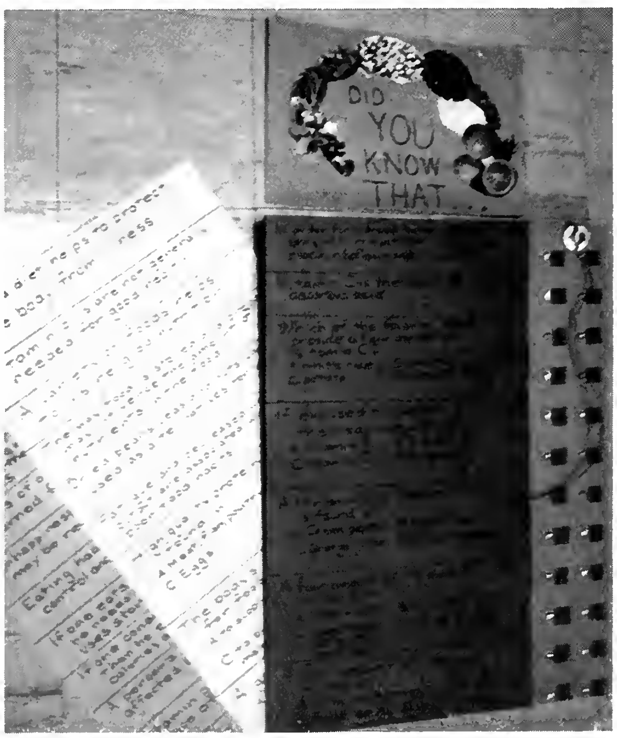


Ms. Dirks pointed out in her booklet that calories are not all bad and stressed that other nutrients occur in foods along with those that provide energy.



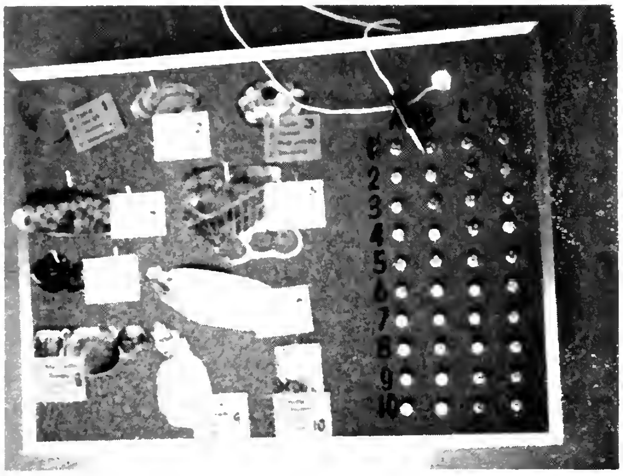
Ms. Rauh helped students who do not like to drink milk to see the need for calcium and to find other foods in which to obtain it.

Ms. Walker led students to compare the nutrient values of a variety of snack foods and to discover that some are quite valuable in the diet. Recipes were included and students prepared and served snacks.

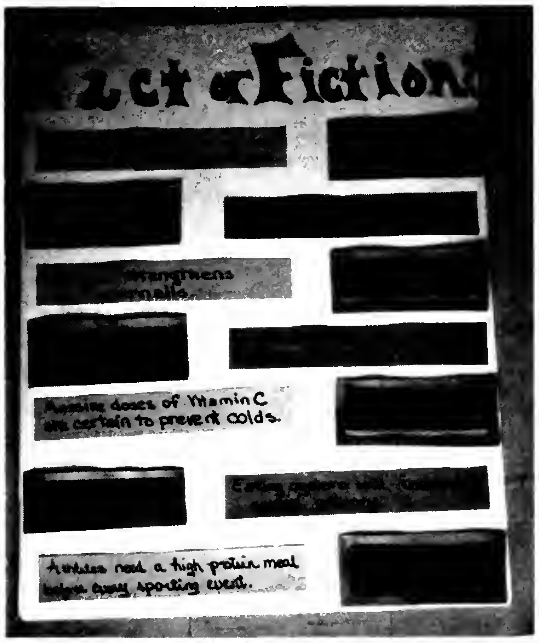


"Electrical boards" always entice students to test their knowledge and to learn. Three workshoppers created versions of this teaching device on pegboard. Instructions for making one type were given in **Illinois Teacher**, Volume XVII, No. 3, January/February 1974, pp. 161-163.

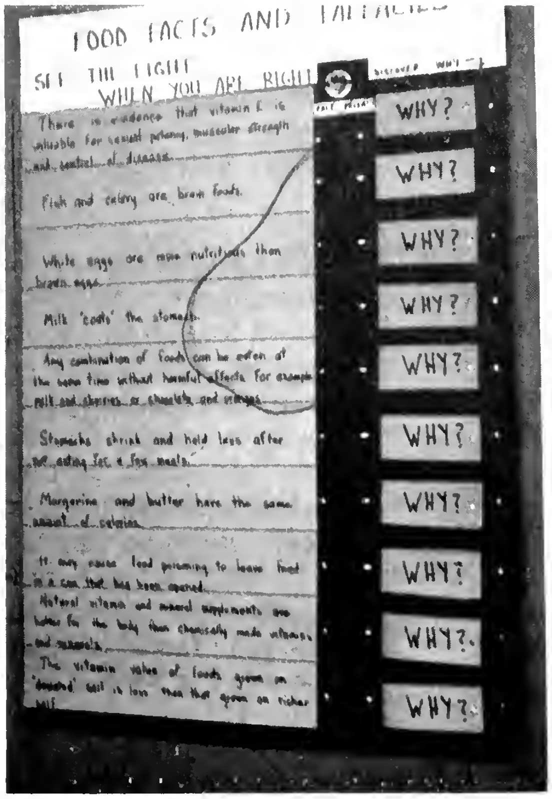
Shirley Rauh had interchangeable sets of questions to extend the usefulness of her board.



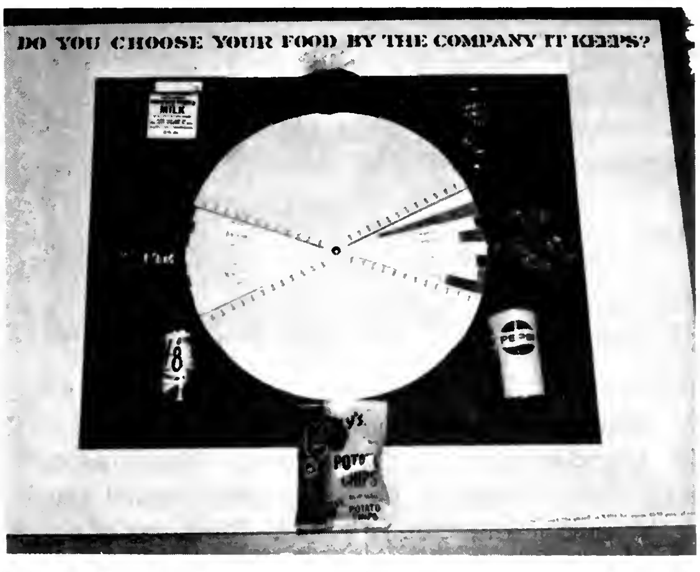
Jan Summers used food pictures to simplify the task for her slower learners.



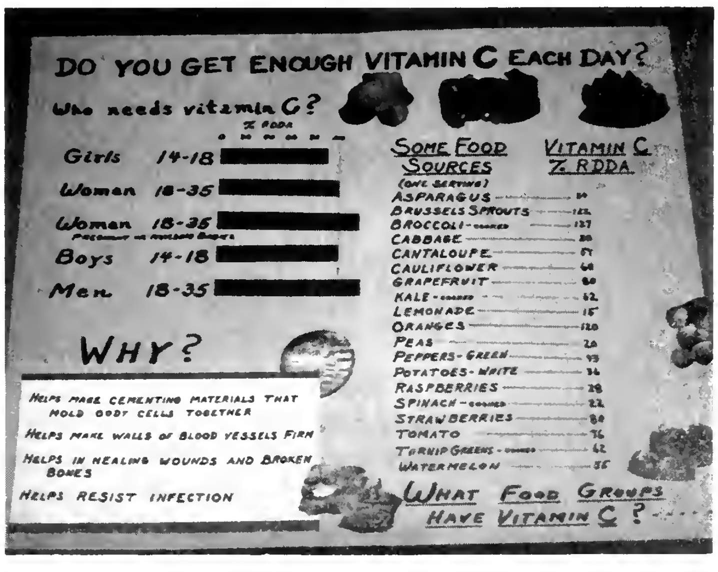
Donna Mrozek helped to dispel some myths with her poster titled "Fact or Fiction." Viewers lift a tab to find out which statements are fact and why.



Paula Walker went a step farther after the light went on and provided a card to lift and find out why the answer was correct.



Sandra Stroh's wheel enabled a student to spin and find out about the nutritive value of several foods displayed around it. Bar graphs indicated amounts of leader nutrients in each food.



Marguerite Iverson's poster provided opportunity for students to learn how much Vitamin C is needed and why, as well as some foods that provide it in varying amounts.

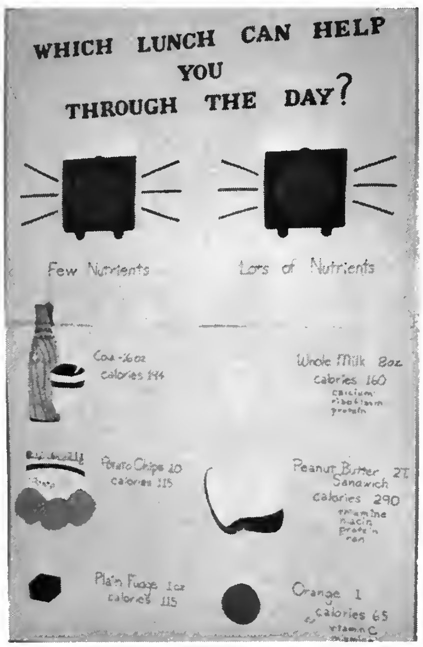
Using the School Lunch to Teach Nutrition

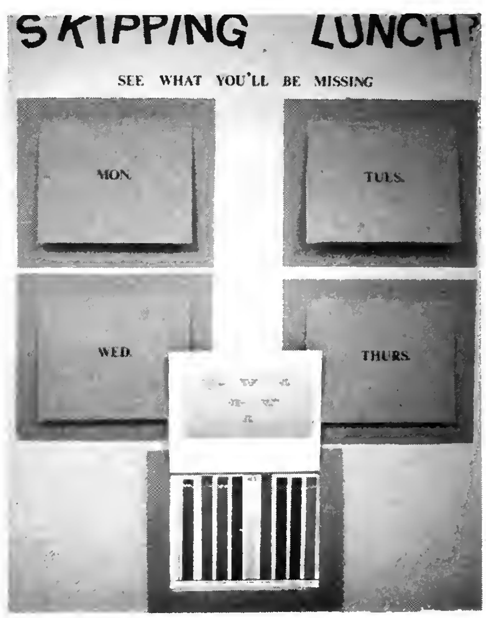
The original Act of Congress which created the school lunch program had as a major aim the teaching of nutrition. In some schools this aim is still in the forefront. Committees composed of teachers, students, administrators, the school nurse, social worker, food service supervisor, and others work together to see that children and youth are not only fed but educated in relation to food and health. Some of these committees sponsor youth groups that work for nutrition education, clubs for overweight students to help them gain control of their weight and eating patterns, and campaigns for improved nutrition throughout the school including posters that help students choose wisely in the cafeteria line. They also try to keep the costs down so students can afford to buy an adequate lunch.

In other schools the picture is not so rosy. No educational program for nutrition is attempted and the school lunch is merely a feeding operation. Vending machines with the usual "junk foods" are handy and, since the profits go to the school, students may even be encouraged to patronize them.

The FHA-HERO program now has nutrition education as one focus and its members may be able to erase some of the problems and promote the positive aspects of school lunch as well as to sponsor nutrition education throughout the school. Information to assist FHA-HERO leaders and sponsors is available from the headquarters staff at 2010 Massachusetts Avenue, N.W., Washington, D.C. 20036.

In the workshop three teachers contributed projects pertaining to the school lunch. **Brenda Dirks**' "stop and go" poster helped point out the kind of lunch that provides the "go" (left below) and **Gwen Blucker's** (right below) which includes the school lunch menus for the week stimulates curiosity and teaches something of the nutritive value of each day's offering. With new menus each week, it could serve throughout the year and students who calculated and recorded the nutritive values would have an extra learning experience.





Dorothy Worden, a fourth grade teacher, involved her "little people," as she affectionately refers to her students, in a visit to the school kitchen and a chat with the cooks. There they borrowed a lunch tray and, back in their classroom, they selected a committee of five to set up the lunch menu on the tray using food models, write on the chalkboard the leader nutrients and where they were found in this menu, and then to tell the functions of one of the nutrients.[1] The next day a different committee of five repeated with the new day's menu and

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[1]References used by the students included "Nutrient Values of Common Foods in Percent of RDA," and "Inside Information About the Nutrients" (written at about fourth grade level) available from *Illinois Teacher* (address inside front cover) for $1.00 each; and Comparison Cards and Food Models from National Dairy Council, 6300 N. River Rd., Rosemont, Illinois.

stressed a different nutrient. This continued until every student had had two turns and all leader nutrients had been emphasized twice. As children reported, the teacher wrote the functions of the nutrients on the chalkboard and left them there for the rest of the day.

One student who was trying to lose weight calculated the caloric value of each day's menu and added to the discussion. He also reported to his mother the calories he had consumed in the lunch.

One might expect such student involvement to increase the participation in the school lunch and to foster greater interest among the food service staff in providing nutritious, attractive lunches.

Other exciting possibilities for using the lunch program (and the breakfast program where it exists) as a laboratory for teaching nutrition remain to be explored. *Illinois Teacher* would be pleased to hear from schools that are capitalizing on this laboratory.

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University of Illinois Home Economics Education Alumnae Conference

The fourth annual Home Economics Education Alumnae Conference, with the theme "Futurism and Home Economics Education," will be held **March 5, 1977**, at the University of Illinois at Urbana-Champaign.

Sponsored by the undergraduate Home Economics Education Student Seminar, the conference will feature guest speakers and panel discussion in such areas as food faddism, teaching the handicapped, metrics, and energy utilization.

Home Economics Education alumnae from the University of Illinois and other interested home economists are welcome. The morning session will begin with coffee and exhibits in Room 22 of the Education Building at 9:15 a.m., and continue with a program in Room 2. The luncheon and afternoon program will be held at the Illini Union.

Interested persons are urged to pre-register by providing the information requested below and sending with a check for $4.00 (which includes the luncheon) **by February 10** to Hazel Spitze, 352 Education, University of Illinois, Urbana, IL 61801.

- -

☐ I plan to attend. Enclosed is $4.00 for registration and luncheon.
(Checks payable to University of Illinois.)

Name ____

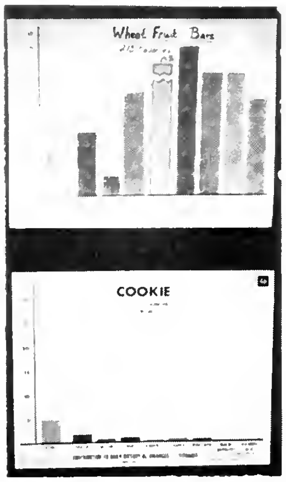
Address ____

Phone ____________________ Year graduated ____________________

MINI LESSONS AT BREAK TIME

A two-and-a-half-hour class requires a break and we made ours a part of our learning. On the first day the instructor provided "refreshments" and a mini-lesson in nutrition about the food served. Thereafter the students took turns doing the same. Learning about the nutritive values of food while one is eating it seems to make sense, and the idea can be adapted to any group of learners. Some examples from the workshop follow:

Bonnie Ahlrich Wachter served Wheat Fruit Bars and made a card showing their nutritive value as compared with vanilla wafers. She also provided the recipe.



WHEAT FRUIT BARS[1]

Combine 1½ cups dried chopped fruit
(¾ cup peaches; ¾ cup dates)
½ cup honey
⅔ cup water
2 tablespoons lemon juice
1 tablespoon lemon peel

Simmer until thick (20-25 minutes)

Sift 1½ cups whole wheat flour
Add ¾ cup brown sugar or 1½ cup honey
¾ cup dates
½ cup wheat germ
½ teaspoon salt
Mix well.
Cut in ¾ cup butter or margarine.
Add 1 beaten egg.

Spread half of latter mixture in 9 x 12 pan.
Spread fruit filling on top.
Cover with remaining "crust."

Bake 400° 20-25 minutes. Cool. Makes 16.

Barbara Swanson used the National Dairy Council Comparison Cards to show the difference between her food and drink and other alternative snacks.

Linda Schmidt served soybean sandwiches (delicious!) and tomato juice and provided charts to show the nutritive values and the comparison with rolls and coffee. Her technique included some guessing before ingredients were revealed.

SNACK		Calories	Protein	Calcium	Iron	Vitamin A	Thiamin	Riboflavin	Niacin	Vitamin C
6 oz. tomato juice	1.	22	2	1	6	19	6	2	7	35
2 slices whole wheat bread	2.	130	10	6	9		18	4	12	
¼ cup cooked soybeans	3.	60	10	4	7		10	3	3	
1 T. raisins	4.	60	1	2	4		2	1	1	
1½ t. pickle relish	5.	10								
1½ t. celery	6.	2								
1½ t. salad dressing	7.	23								2
		307	23	13	26	19	36	10	23	37

[1]Source: *Good For Me Cookbook*, Karen Craft, Research Associate, 4843 Mission St., San Francisco, CA 94112.

Donna Mrozek simulated a radio talk with her mini-lesson and served a specially nutritious bread with fruit juice. Moving to this attractive table was a pleasant interlude and enabled students to relax some muscles as they learned. ⟶

⟵**Ruth Dow** focused on iron and showed us how snacks can help us avoid this common deficiency. Her mini-lesson went like this:

Good evening. This is Channel 13, S-N-A-K. Tonight's Nutrition Spotlight is on IRON—iron as in skillet [*hold up iron skillet*], or iron as in prunes, apricots, dates, and raisins [*show some as each fruit is mentioned*].

Iron is the nutrient most likely to be deficient in the U.S. diet—especially for women.

We all know that people are eating more snacks than ever. Rather than trying to stop snacking, we can choose nutritious snack foods.

Several dried fruits are fair-to-good sources of that needed nutrient, iron. Half-cup servings of prunes, dates, raisins, or dried apricots provide 12 to 23% of the RDA for women, (nearly twice that percentage for men and for women over 55).

These fruits are "sweet snacks," so you can avoid high sugar/high fat candies and cakes and still add iron to your diet. All but apricots are about five cents an ounce, and even apricots cost less than some candy.

Iron is not well absorbed by our bodies; on the average, only 10% of the iron eaten is absorbed. There are some things we can do, though, to improve iron absorption. Iron eaten in or with animal protein, like meat, or with ascorbic acid (Vitamin C) will be better absorbed. So tonight the liquid in our snack will be in a different form—in watermelon, an excellent source of Vitamin C, and a fair iron source. In other seasons I could use a citrus juice, strawberries, or other good Vitamin C sources.

Iron cookware [*hold up skillet*], especially when acid foods are cooked in it, provides iron in the diet, apparently in highly usable form.

So let's enjoy these iron-rich dried fruit snacks—apricots, raisins, dates, prunes—enhanced by Vitamin C-rich watermelon [*display arrangement of fruit*]. This has been Nutrition Spotlight, and this is Channel S N A K signing off for tonight.

Editor's Note: The next week a ten-item "pop quiz" revealed that students had learned and remembered some important facts about iron and its use in the body.

ANNOUNCEMENT

COMPETENCY-BASED PROGRAMS FOR ADULTS?

A 12-month project titled, "Identification and Analysis of Competency-Based Adult Vocational Education Programs," has just begun at The Center for Vocational Education. The purpose of this project, funded by the U.S. Office of Education, Bureau of Occupational and Adult Education, is to assemble information on competency-based programs for adult learners in education, business/industry, and government agencies.

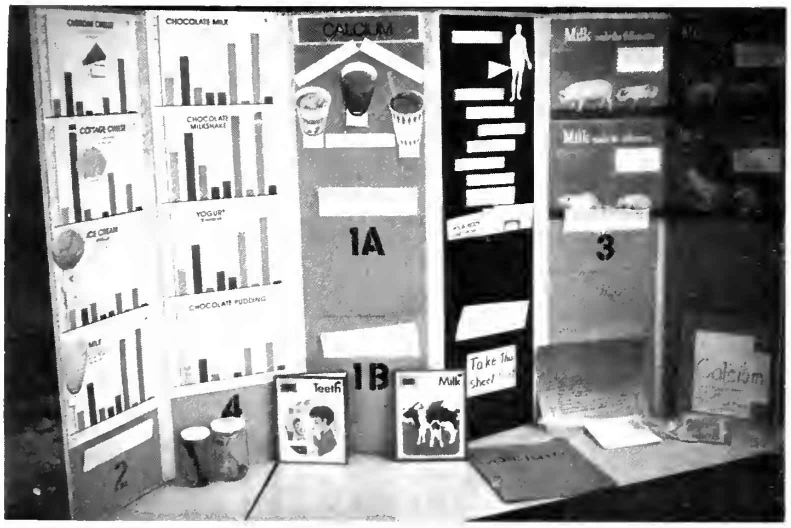
Major project efforts will be to survey such programs, prepare a national program directory, and conduct a workshop to disseminate project findings to program developers and operators. Persons who know about specific competency-based vocational programs for adults are asked to pass such information along to Earl Russell, Project Director, at The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210. The phone number there is (614) 486-3655.

NUTRITION LEARNING CENTERS

Linda Schmidt
Homemaker-Home Economist
and Substitute Teacher
Altamont, Illinois

The four nutrition learning centers shown on this page are for use in grades two, three and four, but can be adapted for use in other grades. These were designed to be used by a substitute teacher to provide a meaningful learning experience for students after they finish their regular classroom assignments. The nutrition information will supplement what is taught in health textbooks. The centers include self-teaching and self-checking materials. One folding board (the cardboard kind used in home sewing for laying patterns on fabric) is used for two nutrition centers, one on the front and one on the back. These boards are easily stored and transported, and are self-standing for use in a corner or free space in any classroom.

The four centers emphasize calcium, iron, Vitamin A and Vitamin C. Other centers are planned for protein, other nutrients, breakfasts, and snacks. Each center is color-keyed to the National Dairy Council Comparison Cards colors for each nutrient. Each center has a directions sheet which guides the student in that center's activities. After s/he completes the first center, which is calcium, he may begin on the "iron" center. Activities are planned to review and reinforce previous nutrients. Each nutrition center has a folder which has answer keys for worksheets, a class record sheet on which each student writes the date s/he completed each part of the center's activities, and a place for students' finished papers. Each center has pictures, charts, or some interest-getting device so that just by standing and looking at the center, a student can learn something about that nutrient. A variety of activities are used to teach why and how the body uses the nutrient and which foods contain the nutrient.



At the Calcium Learning Center the children are directed to:

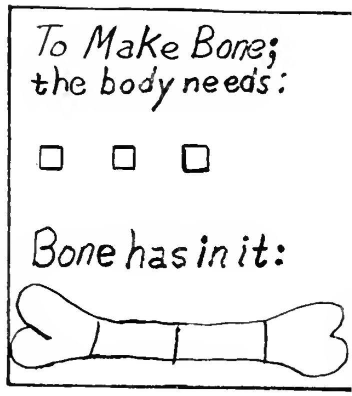
1. Select one of the two worksheets about foods that contain calcium.
2. Look at and answer questions about the Comparison Cards.
3. Read about one of the National Dairy Council pictures "Milk Made the Difference" and answer questions.
4. Try to bend the two bones (one of which has been decalcified).
5. Read one of the books shown or listed.
6. Play the Calcium Game or the Bone Game.

The Bone Game

Objective: To learn that many different nutrients from foods are needed for the bones in our body.

Supplies: Game board with spaces for calcium, other minerals, Vitamin D, phosphorus, Vitamin A, Vitamin C, and protein; button or marker for each player; card for each player; nutrient pieces; die.

Directions: Place the calcium pieces on the calcium space, Vitamin A pieces on Vitamin A spaces, etc. Each player puts his button on the start space. Throw die to see how many spaces to move. If player lands on a nutrient space, he takes one piece and puts it on his card. Winner is the first one to get all the nutrients that are in bones and needed by bones.



7. Read a story about calcium and answer the questions.
8. Make a picture to tell about calcium.

At the Iron Learning Center the children:

1. Look at the Comparison Cards and answer the questions.
2. Do the Iron puzzle (see page 125).
3. Read facts about iron under iron questions at the center (from Inside Information[1]).
4. Read iron stories and answer questions.
5. Answer the questions about iron and review questions about calcium on the electric board.
6. Play the Anemia Game

At the Vitamin A Learning Center they:

1. Read the Vitamin A information sheet at the center.
2. Answer questions about the squares of Vitamin A (10% RDA = one square) as shown with the pictures of Vitamin A foods at the center.
3. Play the Vitamin Values Game (from *Illinois Teacher*, Vol. XVI, No. 1, page 54, 1972) or Go to the Store Game.
4. Read the question on the Vitamin A wheel, turn the wheel and check their answer.
5. Do the Vitamin A puzzle sheet.
6. Do the Vitamin A put-together puzzle.

At the Vitamin C Learning Center they:

1. Look at and answer questions about Vitamin C Comparison Cards.
2. Read a Vitamin C story and answer questions.
3. Find the green bricks at the center. Vitamin C acts like glue to hold the body cells together just as mortar holds bricks together. Lift each brick to learn more about Vitamin C (Inside Information[1]).
4. Do puzzle about Vitamin C foods.
5. Select one of the booklets and read the pages marked.
6. Play the Nutrition Checker Game with the usual checker rules except you must answer correctly the question on the square before you may land there. The questions are about all four nutrients.

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[1]Booklet available from *Illinois Teacher* for $1.00.

Principles taught via the Nutrition Learning Centers

1. Diet affects health.
2. Different nutrients have different functions in the body.
3. Foods vary in nutritional value.
4. All persons have a need for the same nutrients but in varying amounts.

Facts or subprinciples for *calcium:*

Everyone needs calcium to help the body work.
Growing children need calcium to help build the bones which form the skeletal framework.
Calcium helps build teeth.
Calcium helps blood clot when you get a cut.
Calcium helps nerves send messages to parts of the body.
Calcium helps muscles to work.
Only a few foods other than milk and cheese foods have calcium.
Calcium works with other nutrients to form bones.

Facts for *iron:*

Iron deficiency causes a type of anemia.
Anemia produces tiredness.
No single food has, in one serving, enough iron to meet the RDA.
The blood needs iron to help it carry oxygen to all parts of our bodies.
Girls and women need more iron than boys and men.
We get iron by eating foods such as meat, dried beans and peas, eggs, whole grain or enriched bread and cereal, and certain fruits and vegetables.

Facts for *Vitamin A:*

Vitamin A helps to prevent blindness and helps our eyes to be able to see in dim light.
Vitamin A helps the body to build bones and teeth.
Vitamin A helps to keep the skin healthy.
Vitamin A helps us fight colds, coughs, and some other common illnesses.
Vitamin A is stored in the body.
The body gets Vitamin A mostly from dark green or deep yellow vegetables and fruits, liver, butter, fortified margarine, and egg yolk.

Facts for *Vitamin C:*

People of all ages need Vitamin C.
Vitamin C acts like glue to hold the body cells together.
Vitamin C helps to make strong blood vessels.
Vitamin C helps to prevent our teeth from falling out.
Vitamin C helps wounds and burns to heal faster.
Vitamin C helps the body use iron.
Vitamin C helps the body use protein.
The body does not store large amounts of Vitamin C so we need to eat foods with Vitamin C every day.
We get Vitamin C from many but not all fruits and vegetables.

IRON PUZZLE

Foods contain nutrients. Your body uses nutrients. Iron is a nutrient that you may not get enough of unless you choose foods carefully. These foods do contain iron:

meat	beans	shrimp
liver	prunes	ham
eggs	raisins	leafy green vegetables
peas	peanuts	broccoli
whole grain or enriched bread and cereal	apricots	tomatoes
	watermelon	dark molasses

Try to find all of the above foods in the puzzle below. Circle the foods forwards, backwards, up or down, or diagnonally.

H	E	S	P	I	N	A	C	H	W
S	H	R	I	M	P	B	Q	S	A
I	W	L	I	V	E	R	A	E	T
L	I	T	S	G	G	E	P	O	E
O	Z	A	X	H	P	A	R	T	R
C	B	E	A	N	S	D	I	O	M
C	C	M	O	E	G	G	C	M	E
O	H	R	N	O	L	D	O	A	L
R	I	U	T	I	R	E	T	T	O
B	R	A	I	S	I	N	S	O	N
P	E	A	N	U	T	S	Z	E	I
E	T	S	E	S	S	A	L	O	M

Answer yes or no.

__________ Iron is a mineral your body needs.
__________ Iron makes bones strong.
__________ Iron helps your red blood cells carry oxygen to all parts of your body.
__________ Children need iron.
__________ Dad and Mom do not need iron.
__________ If you don't eat foods with iron, you may feel tired and sleepy most of the time.
__________ Liver has lots of iron.
__________ Iron is the only nutrient your body needs.

When you have finished this sheet, get the answer sheet and check it yourself.

Nutrition and Body Systems in the Elementary School

The file of materials and teaching aids which the author created and accumulated added immensely to the effectiveness of the curriculum she describes here.

Sue Garton
School Nurse
and Health Education
Coordinator
Armstrong-Ellis (Illinois)
Public Schools

Carefully planned school health education programs can play a vital role in helping students gain an interest in nutrition and increase the likelihood that they will develop sound eating patterns. A sequential curriculum, which minimizes unnecessary repetition and counteracts the tendency to limit the nutrition unit to study of the four food groups, can make nutrition education a meaningful and challenging experience for the learner.

The curriculum described here is a part of the total Health Education curriculum developed for the Armstrong-Ellis, Illinois, school district in response to the "Critical Health Problems and Comprehensive Health Education Act" which became Illinois law in August, 1971. This law calls for a planned, sequential health education program for grades K-12 in all Illinois schools. It lists specific topics that are to be covered, including nutrition, and provides broad guidelines for curriculum development.

The organizing framework for the Armstrong-Ellis health curriculum is the body systems, i.e., the skeletal system, the digestive system, the endocrine system, etc.[1] Thus, at each grade level, the various content areas are considered in relation to a particular body system. This does not mean that body structure and function are the primary concern. Rather, the systems approach provides a unifying framework that gives continuity to the diverse aspects of health. It encourages the student to view health as a whole, rather than as a series of fragmented topics, while capitalizing on the student's natural interest in his own body.

For example, the skin and five senses serve as the integrating factors at the second grade level. Simple experiments concerning skin structure lead to a discussion of individuality. Investigations about bacteria, the practice of simple first aid procedures, and discussions about cleanliness, are part of the content involved in the study of the protective function of the skin. The child's interest in nutrition is expanded through the discovery of food nutrients, especially those essential to healthy skin. Examination of the five senses includes a look at their contribution to food enjoyment, as well as the relationship between the senses, safety and pollution. The role of the school nurse is also a part of this unit.

The eighth grade program, which focuses on the nervous system, progresses from the nervous system as a physical structure to its relationship to mental and emotional health, drug use and abuse, sexual growth and responsibility. The connection between nervous system functions and essential nutrients is explored. Students also examine the role of nutrition in social and emotional health, along with the consideration of food fads and fallacies.

Hopefully, these examples provide some idea of the broad range of the health education curriculum as a whole. A more detailed outline of the nutrition component, which is carefully integrated into the total program, is represented in the following scope and sequence chart.

The goals of the nutrition curriculum are to help students:

1. Discover that learning about food and nutrition can be fun.
2. Form positive attitudes toward eating a wide variety of food.
3. Recognize the basic concepts in nutrition and associate them with health and well-being.
4. Develop a long-term interest and concern for nutrition.

The author expresses appreciation to Dr. Esther L. Brown, Nutritionist in the University of Illinois School of Human Resources and Family Studies, for reviewing this article and discussing it prior to publication.

[1]In this respect, the Armstrong-Ellis curriculum is similar to the "Elementary School Health Curriculum Project," an innovative health education model developed in cooperation with the National Clearinghouse for Smoking and Health.

NUTRITION EDUCATION COMPONENT

1) Nutrients to be given special attention:*

Grade level: Body System	Protein	Fat	Carbohydrate	Water	Vitamin A	Thiamin	Riboflavin	Niacin	Vitamin C	Vitamin D	Vitamin K	Calcium	Iron	Fluoride	Iodine
Kindergarten: (General health)															
First: (General health)															
Second: Five senses Skin	X				X	X	X	X	X						
Third: Skeletal	X								X	X		X		X	
Fourth: Digestive	X	X	X	X	X	X	X	X	X			X	X		
Fifth: Endocrine	X														X
Sixth: Respiratory	X				X				X				X		
Seventh: Circulatory	X	X	X	X		X			X		X	X	X		
Eighth: Nervous	X		X			X		X				X			

2) Other nutriton topic areas:

Foods contain nutrients.
Food experiences.

Frequency of eating and its relation to health.
The morning meal.
Growth and nutrition.

Relation between senses and food enjoyment.

Interrelationship of calcium and phosphorus. Soft drinks and phosphorus.

Food safety.
Digestive process.
Body weight.
Four food groups.

Nutrition and disease control: diabetes goiter

Nutrition and heart disease.
Weight control.

Food fads and fallacies.
Nutrition—social and emotional factors.

*It is recognized that each nutrient has many functions other than those listed and trace elements not included here may be involved. To avoid overwhelming the students, however, the relationships between nutrients and body systems as indicated above, are those that are stressed in the curriculum.

This curriculum plan has been developed with a concern for sound learning principles and conditions. It is designed to spark interest and motivation, provide for individual needs and abilities, and utilize both individual and group activities, with each adding value to the other.

The curriculum expresses a positive approach and places emphasis on the role of personal action in health behavior. Decision-making, problem-solving and value clarification activities are represented in many of the learning experiences. These involve the active participation of the students and are meant to be enjoyable as well as educational.

The curriculum is designed as a guide to the teacher. Flexibility, adaptation and additions are encouraged along with a continuing concern for accuracy of nutrition information.

The curriculum is also related to student development. The units for kindergarten and first grade deal mainly with positive food experiences, utilizing tasting parties and snack time to develop an interest and excitement about a variety of foods. Experiments, involving plants or animals, are used to develop the concept that food contains nutrients that promote growth and health. At this level, as well as all others, the teacher is encouraged to augment the

planned curriculum by utilizing opportunities to integrate nutrition education with other learning activities. Thus, good nutrition is promoted throughout the year in many ways, by both action and words.

The curriculum format demonstrates the integral relationship between principles, behavioral objectives, learning and evaluation activities and resources. It focuses on student achievement of behavioral objectives through learning experiences geared to the appropriate level of the students.

It is our aim to have objectives that are neither too general nor so specific that they limit teacher creativity and initiative. They are stated in terms of the learner and they are operational, in that the student can practice and demonstrate the desired behavior. An attempt has been made to include behavioral objectives that represent the cognitive, affective and action domains.

The principles included in the curriculum reflect the significant and important concepts of nutrition education. The resources used, whether teacher made or commercially available, were carefully chosen to portray accurate and up-to-date information. In the same manner, the learning activities aim at meaningful learning experiences for the student. Evaluation activities are designed to be positive, indicating student strengths and weaknesses while providing motivation for learning.

An example of the curriculum is included below. The first column includes both the principle, in capital letters, and the behavioral objective, which is in italics. Learning and evaluation activities are described in the center column, with resources listed to the right.

CURRICULUM GUIDE: FOURTH GRADE LEVEL

Principles and Objectives	Learning Activities	Resources
RECOMMENDED DIETARY ALLOWANCES ARE THE AMOUNTS OF SPECIFIED NUTRIENTS CURRENTLY RECOMMENDED BY A COMMITTEE OF NUTRITION SCIENTISTS TO MEET THE NEEDS OF SPECIFIED GROUPS OF HEALTHY PERSONS. *Explain or demonstrate the meaning of RDA.*	1. Explain to the students in their language the meaning of RDA—recommended dietary allowances. (Scientists who study about health and food have recommended amounts of each nutrient that will help keep the body healthy. In general, if 100% of the RDA for each nutrient is consumed, the needs of the body will be met.)	
	2. Use a flashlight and batteries to simulate the concept: • Pretend the flashlight is your body, and the batteries are the nutrients. • What happens when only one battery is used, i.e., when we do not get enough nutrients? (The body cannot work properly.) • What happens if enough nutrients are consumed, i.e., both batteries are put in the flashlight? (The body works well, assuming all other parts are in good working condition.) • What would happen if we added a third battery, i.e., extra nutrients? Would it work better? (No.) Could it hurt the body? (Possibly.)	Flashlight and 3 batteries
	3. Help the students conclude that the RDA can be a useful guide in helping us select the foods we need for health and well-being.	

The curriculum provides for reinforcement, through planned and progressive re-introduction of material at increased levels of sophistication. Since nutrition is approached from a different angle each year, boring repetition is minimized and new knowledge builds upon that of the past in a spiraling effect.

With this background in mind, we might consider some examples which illustrate the curriculum in action. The nutrient, Vitamin A, is included in the content at three different levels. In the second grade, with the skin and senses as the integrating factors, discussion and art work lead to the concepts that Vitamin A promotes eye health, helps to prevent night blindness and contributes to smooth, soft and healthy skin. In learning another concept, that dark green and deep yellow vegetables are generally good sources of Vitamin A, the students

are involved in a treasure hunt to find cards picturing foods that contain varying amounts of Vitamin A. When the cards have been found, students place them in the proper location on a large Vitamin A chart, which depicts in graph form the percentage of Vitamin A found in the pictured foods, as well as the percentage which supplies one day's RDA for Vitamin A for this age level. Through discussion following the activity, students can recognize foods which are good sources of Vitamin A and then relate these foods to their own personal diet.

In another activity, selected food models are displayed in pairs that include one dark yellow or dark green vegetable and a lighter colored vegetable, e.g., sauerkraut and spinach, turnip greens and turnips, etc. Students are asked to choose the food in each pair that contains the most Vitamin A. They can self-check their answers by referring to the food values listed on the back of each model. (A marker placed under each correct model would allow self-correction for younger or slower readers.) Following this activity, students form conclusions about Vitamin A food sources and are led to the recognition of concepts such as:

1. All vegetables do not contain a large amount of Vitamin A.
2. Dark green or dark yellow vegetables generally contain more Vitamin A than pale-colored vegetables.

A tasting party is held and favorite or unfamiliar Vitamin A foods served. Further reinforcement is provided by a bean bag game. A large "A" provides the background for Vitamin A food sources, drawn with felt-tip pen on a large vinyl cloth. Each food is labeled with an appropriate score, based on its % RDA of Vitamin A. Using a bean bag, made of dark green and dark yellow material, students accumulate points, depending upon where the bean bag lands. The game can be played individually or in teams, with carrot sticks serving as an appropriate prize for the winners to share with all students.

At the fourth grade level, with the digestive system as the focal point, nutrition comprises the major part of the health unit. Several activities review the concepts:

1. Nutrients are found in foods.
2. Different foods contain varying kinds and amounts of nutrients.
3. Each nutrient has specific uses in the body.

Previous knowledge about Vitamin A is supplemented as students use a wide variety of resource material to research and report on the major nutrients. Students are encouraged to make use of visual aids, skits, etc., to present their reports. Guiding questions are also provided to personalize the research and reporting process and to encourage the students to apply and analyze the facts that they have assembled.

The respiratory system, central point of the sixth grade health education program, emphasizes the nutrients Vitamin A, protein, Vitamin C and iron. Thus, the functions of Vitamin A, studied in earlier years, are briefly reviewed followed by emphasis on the function of Vitamin A as it helps to keep mucous membranes healthy and resistant to infections. A pretest helps determine student knowledge of Vitamin A food sources. Food models are used to display a day's diet low in Vitamin A, and students are asked to determine the missing nutrient. Working individually or in groups, the students then add foods necessary to bring the missing nutrient up to the recommended level. Another activity, the Vit-A-Vend Machine (see page 101), uses food cards and a vending machine poster to reinforce student knowledge of Vitamin A food sources.

During this unit students also keep a personal food diary. After calculating the % RDA for the various nutrients, including Vitamin A, they can analyze their diet to determine whether changes are in order. Hopefully, a positive approach combined with knowledge, will result in actual behavioral changes.

Correlating with the learning activities and principles relating to Vitamin A at the sixth grade level, are these behavioral objectives:

1. Describe the effects of Vitamin A on the respiratory system.
2. Determine the % RDA of Vitamin A in each of 15 personal food choices.
3. Recognize the deficiency in a diet that lacks Vitamin A.
4. Identify foods which are good sources of Vitamin A.
5. Relate knowledge of Vitamin A food sources to personal food likes and dislikes.

Through this example, I hope it is apparent that students can learn about nutrition without needless repetition, yet with reinforcement that promotes learning.

One of the primary goals of nutrition education is to develop a lifelong concern and interest in nutrition. For this reason, the core of learning activities outlined in the curriculum will need to be continually augmented by the development of optional experiences that allow the students to follow their own interests and abilities. Many games and simulations are used,

and students are encouraged to develop new ones of their own. Students are involved in teaching others what they have learned about nutrition.

Furthermore, an explicit attempt is made to promote the home-school relationship. For example, fourth grade students complete several activities designed to establish a pattern for a balanced diet. They are asked to construct a nutritionally balanced menu, and this menu is then included in a letter to their parents with a request that the menu be served in the coming week. Thus, the students are encouraged to share their nutrition knowledge with their family. Interviews with the school cook and analysis of several hot lunch meals are other examples of education which seeks to move beyond the classroom.

On the whole, the results of the Armstrong-Ellis curriculum have been exciting. Student interest, in both nutrition and health, has exceeded our expectations. We feel that this approach is a viable option for making nutrition a meaningful experience for elementary and junior high students. ▲

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ideas that worked

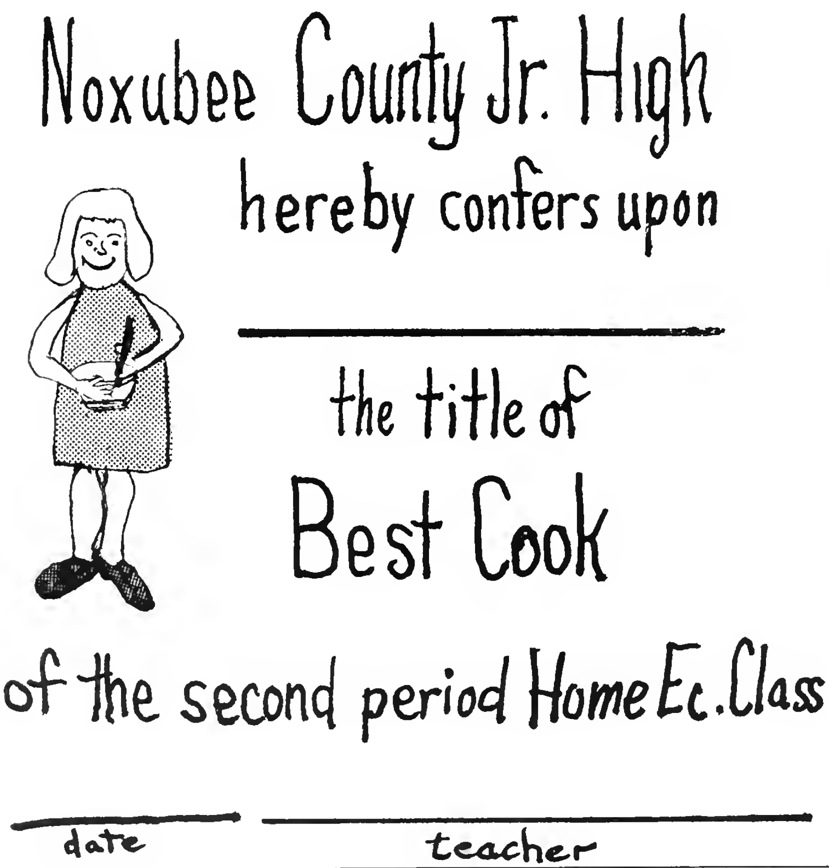
by Nancy Nixon

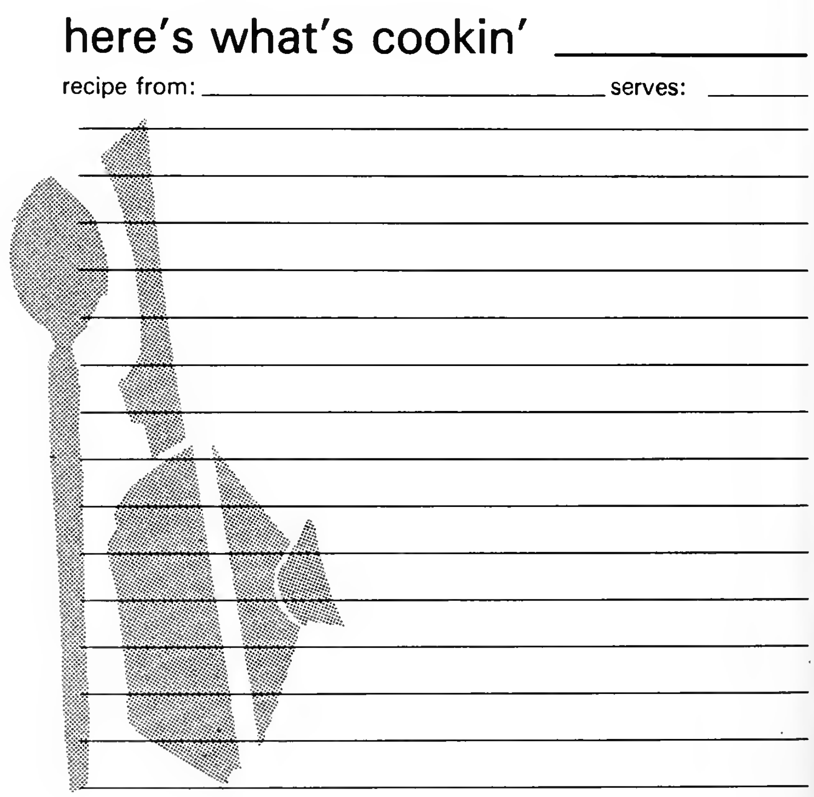
At the time this idea was submitted to *Illinois Teacher* by Elizabeth Stifflor, teacher educator, Nancy was a student teacher at Mississippi State University.

Editor's Note: Extrinsic rewards may reduce motivation for learning but when tangible rewards that are intrinsically related to the learning of the subject can be provided, motivation may be increased as Nancy Nixon reports here.

Ninth-grade, culturally-disadvantaged students in a rural Mississippi town participate more eagerly in foods and nutrition class discussions, laboratories, tests, bulletin board construction, and other activities, since I began to reward them with colorful recipe cards for successful efforts. Because few students have cookbooks at home, the cards are treasured and used to record favorite class recipes. We also have an election in which students, by secret ballot, vote for the "best cook" who receives a recipe box for her cards.

In addition, we have certificates for those who, again by secret ballot of students, rate awards for Tidiest Cook, Speediest Cook, Most Delicious Cook, etc. We try to have as many of these as possible so that many students can experience this kind of reinforcement. This allows us to recognize many kinds of talents. Other possibilities include Best Team Member in the Kitchen, Cook with Most Nutrition Knowledge, Best Dishwasher, Most Cheerful Cook, Most Accepted Leader in the Kitchen, Best Menu planner, Most Economical Cook, Best Table Setter, Best Waitress, and Most Business-Like Manager.





A metric cookbook, **COOKING THE METRIC WAY: AN EASY GUIDE TO GOOD NUTRITION**, has been published by the British Columbia Home Economics Association. The book is divided into sections about metrics, nutrition, purchasing, recipes, microwave and large quantity cookery. It can be purchased for $3 from: B.C. Home Economics Association, 2268 Kensington Ave., Burnaby, British Columbia V5B 4E2. A booklet, **COOKING THE METRIC WAY**, contains seven recipes and is published by Corning.

METRIC RECIPES

FOR CLASSROOM USE

Judy Oppert, Ed.D.
University of Illinois

Last year we invited *Illinois Teacher* readers to send us metric recipes you had found useful in the classroom, and we included guidelines for writing metric recipes (Vol. XIX, No. 1, page 55). We appreciate your responses and are publishing the recipes we received. We hope they will help to fill the void until more metric recipes are readily available from other sources.

Vaun Swiger, Chairperson of the Home Economics Department of South Division High School in Milwaukee, Wisconsin, developed six metric recipes with her high school students. She borrowed metric volume measures from the science department and found that the measures were very accurate. As a result she felt that the products were superior. Lorraine Glasa, Home Economics Teacher at Brookens Junior High School in Urbana, Illinois, and her ninth grade foods class tested and modified these recipes.

Our Canadian neighbors have been moving to metric, and they developed the recipe for Chocolate Chip Cookies. Betty J. Landes of Cineban, Washington, used the Apricot Whole Wheat Bread to teach the simplicity of metric recipes as well as quick breads and the use of soda for leavening. Gracie Specks, Foods and Nutrition Instructor at Mary Hardin-Baylor College in Belton, Texas, sent a booklet of original recipes (remaining recipes below) developed by students in an experimental foods class. Perfecting the recipes helped her students start thinking metric as well as cooking metric.

UPSIDE DOWN HAMBURGER PIE
(Using Metric Master Mix)

200 ml ground beef
20 ml shortening
100 ml chopped onions
100 ml chopped celery
100 ml green pepper
300 ml tomato soup (1 small can Campbells)
5 ml Worchestershire sauce
450 ml master mix
115 ml milk

Sauce

1. Brown meat in hot shortening.
2. Stir constantly.
3. Add onion, celery, and green pepper.
4. Cook 3-5 minutes.
5. Add soup, sauce, and salt.
6. Heat to boiling.
7. Put meat mixture into pie pan.

Metric Master Mix Biscuit Dough

1. Add milk to master mix.
2. Knead until smooth—about 15 times.
3. Roll into circle (like a pie crust).
4. Put the circle of dough on top of meat mixture in the pie pan.
5. Bake at 240°C (450°F) for 15 minutes.
6. Let stand for 3-5 minutes.
7. Invert over serving platter.
8. Cut into pie-shaped pieces.

METRIC MASTER MIX

2000 ml flour
45 ml baking powder
15 ml salt
450 ml shortening

1. Stir baking powder and salt into flour.
2. Sift together 3 times.
3. Cut in shortening until it is the consistency of cornmeal.
4. Store in a tight container at room temperature.

(To measure, pile lightly and level off with a spatula or flat edge. Do not sift.)

COTTAGE CHEESE STUFFED EGGS

6 hard boiled eggs
60 ml cottage cheese
10 ml prepared mustard
3 ml salt
1 ml white pepper
1 ml onion powder
5 ml parsley flakes
1 ml celery seed
10 ml dill relish

Slice hard boiled eggs lengthwise and remove yolks. Mix yolks and other remaining ingredients either by hand or electric mixer. Fill egg whites with the mixture and garnish as desired. Yield: 6 servings.

OATMEAL COOKIES
(Using Metric Master Mix)

600 ml mix
150 ml brown sugar
10 ml cinnamon
1 egg well beaten
130 ml milk
200 ml quick rolled oats
200 ml chopped nuts, and/or raisins
3 ml nutmeg
45 ml granulated sugar

1. Stir mix, sugar, nutmeg, and cinnamon together.
2. Add milk to beaten egg.
3. Add milk and egg mixture to mix, sugar, and cinnamon.
4. Stir until well blended.
5. Stir in oats.
6. Stir in nuts and/or raisins (chocolate chips may be used).
7. Drop by 5 ml measure on greased baking sheet. Makes about 10 doz. cookies.
8. Bake at 190°C (375°F) for 12 to 15 minutes.
9. Cool on cooling rack.

LASAGNA

Sauce

300 grams ground beef
50 ml minced onions
3 ml salt
4 ml garlic salt
3 ml oregano leaves
3 ml basil
250 ml water
250 ml tomato sauce
200 ml tomato paste

1. Brown meat.
2. Stir in remaining ingredients. Heat to boiling.
3. Reduce heat, cover, and simmer for 20 minutes.

Noodles

1. Bring 3 liters of water to rapid boil in large (4 liter) pan.
2. Add 2 ml salt.
3. Add 1/2 pkg. (7-8 noodles) to water slowly (do not break).
4. Cook until tender (about 18 to 20 min.).
5. Rinse in cold water.
6. Drain well.

Cheese

Blend together:
130 ml cottage cheese
100 ml Parmesan cheese
100 ml grated mozarella cheese

Combine in shallow baking pan as follows:

1. Put a layer of noodles in bottom, then cheese, then meat and repeat layers.
2. Bake 180°C for about 30 minutes.

APRICOT WHOLE WHEAT BREAD

50 ml shortening
150 ml granulated sugar
1 egg
200 ml canned apricots
50 ml apricot syrup
300 ml all-purpose flour
300 ml whole wheat flour
2 ml salt
5 ml baking soda
200 ml buttermilk
200 ml nut meats
rind of 1 orange

Cream shortening and sugar. Beat in egg. Puree apricots and syrup in blender and add to creamed mixture. Sift dry ingredients together. Add sifted ingredients alternately with buttermilk to creamed mixture. Stir just until blended. Fold in nuts and orange rind. Place in greased 23 x 13 cm (9 x 5 in.) loaf pan and bake at 175°C (350°F) for 1 hour. Yield: 1 loaf.

CORN FRITTERS

1 egg
115 ml milk
15 ml melted Crisco
330 ml drained whole kernel corn
200 ml sifted flour
15 ml sugar
5 ml baking powder
4 ml salt
shortening for deep frying

1. Beat egg, add milk, and mix.
2. Stir in melted Crisco and drained corn.
3. Combine flour, sugar, baking powder, and salt.
4. Add these dry ingredients to egg-milk mixture.
5. Stir just enough to evenly distribute the ingredients.
6. Drop from a 15 ml measure into shortening heated to 185°C (365°F).
7. Fry for about 4 minutes, until brown and done in the middle.
8. Drain on paper towel.

CHOCOLATE CHIP COOKIES

425 ml flour
2 ml baking soda
2 ml salt
225 ml butter or oleo (1 stick)
175 ml granulated sugar
175 ml brown sugar
1 egg
5 ml vanilla
250 ml chocolate chips (175 g package)
125 ml chopped nuts

Preheat oven to 190°C.

Sift together flour, baking soda, and salt. Cream butter and sugars together. Add egg and vanilla, beating until light and fluffy. Stir in dry ingredients. Fold in chocolate chips and nuts. Drop batter from a 5 ml measure about 5 cm apart on ungreased baking sheet.

Bake in preheated 190°C (375°F) oven for 8 to 10 minutes, or until golden brown. Makes about 4 to 5 dozen.

OATMEAL BANANA-NUT BREAKFAST BREAD

125 ml margarine
185 ml sugar
2 eggs
3 small bananas, mashed
125 ml milk
125 ml raisins
125 ml oatmeal
375 ml flour
3 ml salt
8 ml baking powder
3 ml soda
125 ml walnuts

Combine in mixing bowl the margarine, eggs, sugar, bananas, and milk. Beat until ingredients are well blended. Approximately 2 min. on med. speed if using an electric mixer. Combine remaining ingredients and add all at once to the margarine mixture. Mix until all the ingredients are blended.

Spoon into a greased-oatmeal coated 21 x 11 x 5 cm pan. Bake at 165°C if using glass pan. A 175°C temperature is necessary if the pan is not glass.

Bake for 1 hour or until toothpick comes out clean when inserted into center of bread. Remove from oven to rack and cool for 10 min. Remove from pan, wrap in aluminum foil and store for a day before cutting.

May be served with either butter or cream cheese.

Yield: 1 loaf

ITALIAN POACHED EGGS

2 240 g cans tomato sauce
5 ml garlic salt
5 ml onion powder
2 bay leaves
3 ml oregano
185 ml peas
4 eggs

Mix all ingredients in saucepan except eggs. Simmer for 30 minutes. Add eggs and poach for 15 minutes. Serve hot. Makes 2 servings.

TEA DOUGHNUTS

1 egg
100 ml milk
100 ml sugar
30 ml melted butter
300 ml sifted flour
10 ml baking powder
1 ml salt
1 ml nutmeg
1 ml vanilla

1. Beat egg—add milk—beat.
2. Sift flour, baking powder, salt, and nutmeg.
3. Add sifted ingredients and sugar to egg-milk mixture.
4. Add melted butter and vanilla.
5. Mix well.
6. Heat shortening for frying to 185°C.
7. Drop 5 ml dough into hot fat.
8. Fry 3 to 5 minutes.
9. Makes about 20.
10. Doughnuts may be rolled in powdered sugar, if desired.

MUSHROOM BEEF CASSEROLE

450 g ground beef
15 ml Worstershire sauce
300 ml tomato juice
60 ml tomato sauce plus 30 ml
10 ml tomato catsup
10 ml barbecue sauce with mushrooms
30 ml American cheese
1 egg
3 ml onion flakes
1 ml garlic salt
3 ml salt
1 ml pepper
5 ml sugar
100 ml mushrooms

Mix all ingredients except 30 ml tomato sauce in 1 liter pan. Shape into bottom of pan and cover with extra tomato sauce. Bake covered 45 min. at 175°C. Remove from oven and spoon off any grease collected, then bake 15 min. longer uncovered. Garnish with parsley. Yield: 4 servings.

SPICED EGGS

6 hard boiled eggs
45 ml yogurt
5 ml dried mustard
1 ml salt
1 ml white pepper
1 ml onion powder
3 ml parsley flakes
15 ml chives
5 ml soy sauce
paprika

Slice hard boiled eggs lengthwise and remove yolks. Mix yolks and other remaining ingredients either by hand or electric mixer. Fill egg whites with the mixture and garnish with paprika if desired.

DIET DESSERT SUPREME

300 ml nonfat dry milk
500 ml water
2 rennin tablets
2 pkg. Sugar Twin

Flavorings

1. Orange Coconut Supreme: Vanilla 10 ml, Orange 5 ml, Coconut 2 ml, Almond 1 ml, Colorings: 1 ml red, 1 ml yellow.
2. Chocolate Almond Supreme: Vanilla 10 ml, Chocolate 10 ml, Almond 2 ml, Colorings: 1 ml red, 1 ml yellow, 1/2 ml green.
3. Lemon Fluff: Lemon 5 ml, Vanilla 10 ml, Colorings: 1 ml yellow.
4. 'Summer' Mint Dessert: Vanilla 10 ml; Peppermint 5 ml; Colorings: 1 ml green.

Put water, Sugar Twin, colorings and flavorings into sauce pan. Stir well. Heat to 43°C or simmer 2 minutes on medium heat. Add 2 well-crushed rennin tablets. Stir only to mix. Pour into cups or glasses. Set 8 to 10 minutes then chill 1 hour before serving. Yield: Four 250 ml servings.

PROMOTING INTEREST IN NUTRITION AMONG COLLEGE STUDENTS

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Nutrition has suddenly become a popular topic of conversation because many people realize that this science is associated not only with how one looks and feels but also with one's physical and mental performance. Yet, teaching nutrition to college students while trying to make the subject stimulating and relevant is still quite a challenge. Goode[1] states that, "in any situation, the best way to teach is that which arouses students' minds and hearts."

Although enrollment in nutrition has increased, many students consider this subject to be as distasteful as a dose of bad medicine. Some of my students have indicated that the lessons on vitamins were the least interesting of all. What, then, can be done to change this image of nutrition as a dull and uninspiring subject? In innovative teaching according to Erant,[2] the student's role as well as the teacher's changes.

The following is an account of such a reversal of roles. At Louisiana State University in Baton Rouge, two undergraduate nutrition classes of approximately 50 students each participated in an experiment to investigate whether small group presentations by class members would stimulate interest and be accepted better than a semester of lectures by the instructor. Both majors and nonmajors were enrolled in each class.

In the experimental class, the instructor began by presenting a multimedia introduction to the vitamins and then gave out an outline to initiate student involvement. Each student selected a specific vitamin in which s/he was interested, and groups of three or four of those with similar interest were formed. The task of each group was to "sell" its vitamin to the remainder of the class, to create a positive image of the important concepts about the vitamin. Dates were set for the reports, and the students began their planning and preparation. Meanwhile, the other class was taught by the traditional lecture method.

A typical class for the experimental method began with the instructor identifying the vitamin to be "sold" and introducing the salespersons. Each one in the group assumed an active role in promoting his/her vitamin.

An excellent presentation on vitamin D was given by four young people. Before the class began, they briefly outlined on the chalkboard the topics to be discussed. A poster showing some important concepts about the vitamin captured the attention of the class. Next, a brief introduction and a short account of the discovery of vitamin D was delivered in a jargon that had student appeal. Following this, a young man with a sign hanging around his neck that read "Mr. D" paced back and forth in front of the class and talked about the functions by explaining that "as a cousin of the other fat soluble vitamins I have inherited some of their characteristics, but I am especially known for being able to . . ." (thus naming the functions in a very elementary fashion that was easy to comprehend). This act really made a big hit and won him the distinction of being quite a "ham." The spontaneity of his actions and words was largely responsible for the appeal of this technique. New terms introduced in talking about functions, such as "pigeon breast," were clarified by using pictures. The group stressed the positive fact that this vitamin can help to prevent rickets rather than the negative emphasis that "if one doesn't get enough 'D' s/he will develop rickets." The pace of the presentation was geared so that those students desiring to take notes could do so.

Another person in the group presented dietary sources by pulling food from a picnic basket. Included were canned tuna and salmon, vitamin D milk and cod liver oil (an unlikely picnic food!). Also showing vitamin D tablets, this student discussed the effects of ingesting too many. A box of granola was used to indicate the importance of reading labels to determine the presence of a specific nutrient. All of these sources were then circulated about the room

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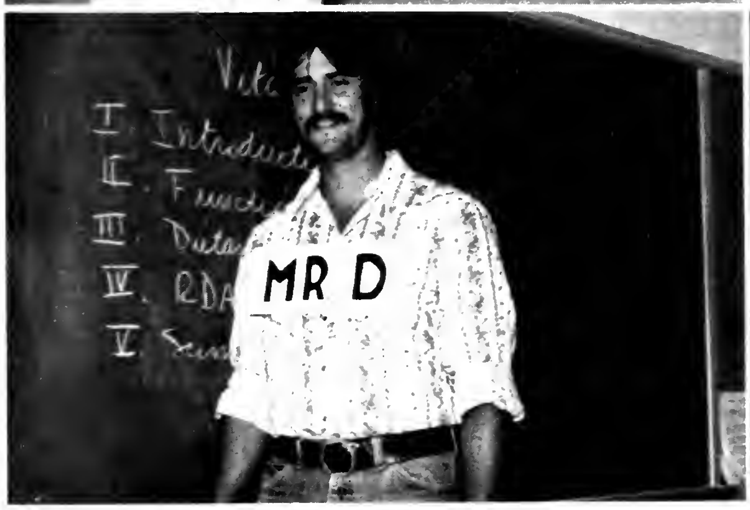
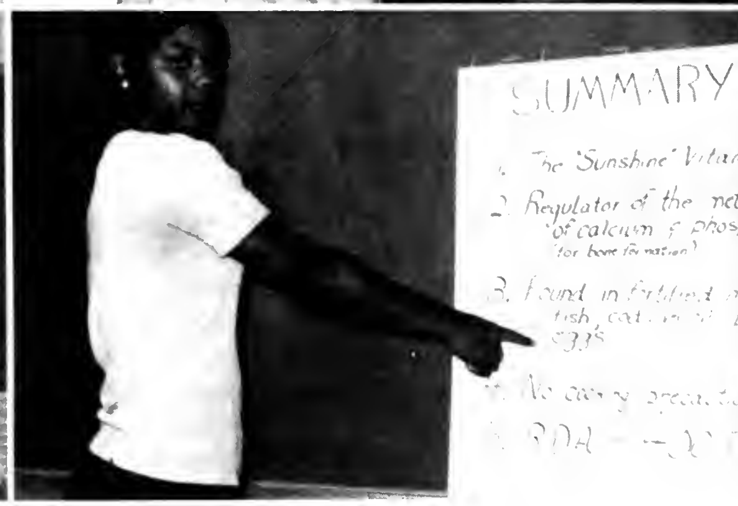
[1] Delmer Goode, "Ways of Teaching," *Improving College and University Teaching,* 22(3) (Summer, 1974), 146.
[2] Michael Erant, "Promoting Innovation in Teaching and Learning Problems, Processes and Institutional Mechanisms," *Higher Education,* 4(1) (February 1975), 13-26.





for closer scrutiny by students. RDAs were explained and shown by a transparency on the overhead projector.

The group concluded the presentation with a brief summary and the distribution of a crossword puzzle to provide recall and reinforcement of the concepts covered. A question-and-answer session followed to furnish an opportunity to clarify misconceptions and/or to introduce important ideas that might have been omitted. If students were slow or hesitant in asking questions, the instructor stimulated further discussion.

The length of the presentations ranged from 15 to 30 minutes although no time restriction was set. Thus, more than one vitamin could be presented in a class period, and this method required no more class time than the more traditional lectures.

With other types of activities and visual aids being utilized, the majority of the student reports were excellent and showed much initiative, imagination, and effort. The unit was concluded by the distribution and discussion of a teacher-prepared outline containing important facts about each of the vitamins. This handout also served as a study guide for the test that followed, since some students had been so engrossed in the presentations that they had not taken notes.

On the final examination to test for nutrition knowledge the student-directed class scored slightly higher than the teacher-directed class.

Oral and written evaluations by students in both classes indicated that the student-oriented method was more interesting and more acceptable than the teacher-directed lectures. However, a number of those in the experimental class felt that too much effort was involved in preparing for the presentations; some were content to be passive listeners rather than active participants. We believe that for those who were active and felt increased interest in the subject the course is likely to lead to continued learning of nutrition outside of classes.

This teaching experiment was a valuable beginning for the instructor, and it did appear to "arouse students' minds" and to stimulate interest. It showed that small group methods could be successful in a large class. It also provided a worthwhile exercise for students in the area of human dynamics. Other activities are under investigation to continue to make the study of nutrition more interesting and relevant for students.

FOODSERVICE WORKSHOP:

A CONFLUENT APPROACH TO TEACHER EDUCATION

Susan F. Weis
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Home Economics Education

John Bellanti
former Assistant Professor
Home Economics Education

and

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Each year since 1970, Pennsylvania has conducted a series of summer workshops targeted to the needs of vocational food service teachers. Teachers for food service programs in the state are recruited from graduates of four-year home economics education programs or from industrial personnel who are willing to pursue teacher certification through an approved internship program. Both sources for teacher recruitment equip food service teachers with a constellation of skills to bring to the laboratories and classrooms. Wayda's study[1] indicated that food service teachers perceived their competencies to lie in a hierarchical ordering from most competent to least competent in the following areas: management, general food service, executing plans, guidance, public and human relations, planning instruction, professional role, and evaluation of instruction (p. 120).

The number of secondary vocational food service programs in Pennsylvania has radically increased from 41 in 1969 to over 100 in 1974. This rapid growth occurred in part to meet the rising industry needs for competent workers and also as a direct result of the establishment of new vocational technical schools during this period.

In recent years the food service industry has been the third largest industry in the United States in dollar volume and has recruited approximately 250,000 employees annually.[2] The industry comprises all restaurants, cafeterias, catering establishments, school and institutional feeding systems, military mess halls, cocktail lounges, fast food, drug store, hotel and food vending operations. Logic suggests and industry projections are that the use of out-of-the-home food service operations will continue to grow and the industry is increasing its tendency to rely on educational institutions to provide occupational programs for preparing and developing its employees.

The food service teacher education workshops have generally focused upon specific objectives related to improving teaching competencies, up-dating industrial knowledge and gaining access to educational materials. Concomitant benefits seem to have evolved from bringing together persons with similar concerns to share ideas, commiserate on common problems, and form a network of relationships around the state to draw upon for assistance and support in the future.

The 1974 workshop resulted from the refinements of planning and leading workshops over the past five years. Staffing the workshop involved the recruitment of individuals with expertise in selected areas as well as enlisting some persons who had participated as learners in previous workshops. The recruitment of learners as teachers for the workshop provided participant representation and input in the planning and implementation decisions for the workshop and an opportunity for these vocational educators to explore the possibility of developing their own careers toward teacher education. Planning efforts occurred over the fifty-week interim between the 1973 and 1974 program. Funding was secured from the Educational Professions Development Act disbursed to the state from the regional office. Announcements were distributed to food service teachers around the state and publicized in a national trade journal.

Three Areas of Concern

The evolution of the workshop encouraged the staff to consider a three-pronged approach to food service teacher education. One area concerned pedagogical skills blended and focused on the history and practices of food service education. The second area targeted current practices of the industry, related issues, and standards for food preparation and service. The third prong explored group processes, and interpersonal skills. The three prongs were more specifically detailed by objectives for the workshop before the staff members went to work on their areas of expertise.

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[1]S. M. Wayda, "Feasibility of Continuing Education for Secondary Food Service Instructors in Pennsylvania Based on Certification Needs, Self-Perceived Academic Needs, and Interest" (unpublished Master's Thesis, The Pennsylvania State University, 1973).

[2]U.S. Department of Health, Education and Welfare, *Training Food Service Personnel for the Hospitality Industry*, Document 82018 (Washington, D.C.: U.S. Government Printing Office, 1969).

The summer 1974 workshop was conducted at the University Park Campus of The Pennsylvania State University for 18 participants, housed with staff in University dormitories. Workshop activities were scheduled from 9:00 A.M. to 6:30 P.M. daily, in the Maple Room Cafeteria and adjacent kitchen of the College of Human Development. Since a "retreat" concept characterized the nature of the workshop, concern for recreation and relaxation of staff and participants resulted in planned rest periods, opportunities to explore the campus and town and occasional parties. Staff members conferred on a regular basis to monitor progress of the workshop.

Evaluation Skills

The portion of the workshop effort focusing upon pedagogical skills had been tuned to developing and refining instruments and strategies for the effective evaluation of students, teachers and programs. Using articles from the April 1973 issue of the *American Vocational Journal*, the group explored, discussed, and applied knowledge of criterion behaviors, theories of testing, management of classroom evaluation, performance goals and testing, rating scales and checklists and grading issues and techniques. Student progress data was examined for its potential use in evaluating teacher effectiveness.

Each participant developed and refined two evaluation instruments or strategies which were then edited and compiled into a single volume for reproduction and distribution to participants and other interested persons.[3]

Food Preparation

A second workshop objective encouraged the examination of standards for food preparation and service and current practices in the industry as they relate to contemporary issues of food shortages, the energy crisis, employment and career development of minorities, women and the handicapped. Among the concepts which were examined and demonstrated were (a) short-time methods of yeast-leavened products, (b) effective use of power machinery, (c) taste perceptions of the consumer and student, (d) development of basic manipulative skills, (e) use of textured vegetable proteins, (f) effective use of critical energy, and (g) teaching techniques as motivators.

Controlled usage and proper scheduling of equipment can contribute to energy conservation in the food service industry. Toward better utilization of food supplies, the use of textured vegetable protein has come into use in this decade, and its uses were critically and creatively appraised in both the kitchen and bakery sections of the laboratory.

To increase the productivity level of the food service worker, now ranked among the lowest of workers, we exposed teachers to mechanical methods in placement of the many manipulative skills that are a part of the traditional food service worker. These methods included the cutting, shaping, forming, and mixing of food products. The various foods prepared are presented in Figure I.

The academically qualified teacher lacking industrial work experience needs to develop relevant work skills to become a more credible and effective teacher in occupational areas. During the workshop these skills were identified, analyzed, demonstrated and discussed prior to being practiced by participants. Feedback on skill development was provided by staff and participants.

The food service worker needs to appreciate and develop the sense of taste to a high degree in order to judge a product in various stages of development. A consciousness-raising discussion of tasting was a continuous part of this sector of the workshop.

The production of yeast raised products, which often take several hours to complete, are a daily problem to most vocational food service teachers because of the scheduling of students. Normally, time does not allow the student to see this product from start to finish. With the utilization of short time dough methodology, teachers can show the complete job sequence to their students and, in addition, broaden their curriculum to include bread and pastry skill areas.

Teaching techniques as motivators was an ongoing topic of discussion. Development of more creative ways to teach, the use of audio visual media, and the importance of language on the student's level were presented, analyzed, and demonstrated.

[3]S. F. Weis and S. M. Wayda, "Evaluation Devices for Vocational Food Service Education" (unpublished document, Department of Home Economics Education, The Pennsylvania State University, September 1974).

	Breakfast	Lunch	Dinner
SUNDAY			Chicken Frankfurter TVP Hamburgers Potato Salad (convenience) Rolls & Buns (quick process) Jello Dream Cake (convenience) Beverages
MONDAY	Orange Juice Assorted Pastry Variations Beverages	Ham Sandwich on Seeded Roll (quick process) Brownies (sponge process) Beverages	Baked Ham/Mustard Sauce Scalloped Potato Green Bean Saute Cole-Slaw Boston Cream Pie (convenience) Beverages
TUESDAY	Orange Juice Assorted Pastry Variations Beverages	Chef's Salad Variations Dressings: Bleu, Russian, Ceasar, French variations Ecology Cookies (recycling products)	Minestrone Soup Spaghetti w/Meat Sauce (assembled convenience) (TVP) Antipasto Biscuit Bonbons (convenience) Hearth Baked Garlic Toast (full time dough)
WEDNESDAY	Orange Juice Assorted Pastry Variations Beverages	Open Cheese Bacon & Tomato Sandwich Lettuce Wedge, Dressing Variations Fruit Salad Beverages	Faubonne (quick method) Batter-Fried Fish Baked Rice Zucchini Saute Cole-Slaw Souffle Jelly Roll (chiffon process) Club Roll (quick process) Beverage
THURSDAY	Orange Juice Assorted Pastry Variations Beverages	Reuben Sandwich (convenience) Potato Salad (convenience) Beverages	Snapper Soup (traditional) Boneless Stuffed Trout (variations; convenience) Steamed Potato Spinach Saute Brioche (classic) Sponge Cake (variation) Beverages
FRIDAY	Orange Juice Assorted Pastry Variations Beverage	Hoagie Variations Potato Chips Custard (convenience) Beverages	Baked Meat Loaf (convenience mix) Tomato Sauce Whipped Potato Peas Strawberry Chiffon (convenience; assembled convenience) Beverages

	Breakfast	Lunch	Dinner
MONDAY	Orange Juice Assorted Pastry Variations Beverages	Cold Roast Beef & Swiss on Onion Roll (convenience) Potato Chips Varied Convenience Desserts Beverages	Ham & Chicken Shortcake Shoe String Potatoes Glazed Carrots, Apples, & Raisins Tomato, Cucumber & Endive Chocolate Chiffon Pie (quick method) Baking Powder Biscuit Beverages
TUESDAY	Orange Juice Assorted Pastry Variations Beverages	Devonshire Sandwich Macaroni Salad Shoo Fly Pie (traditional) Beverage	Beef Stew Broccoli Hollandaise Tossed Salad German Apple Cake (convenience) Soft Roll Beverages
WEDNESDAY	Orange Juice Assorted Pastry Variations Beverages	Bacon, Lettuce & Tomato Sandwich Potato Chips Cottage Cheese Variations Napoleons Beverage	Cold Baked Ham Cumberland Sauce (convenience) Potato Salad Asparagus Vinaigrette (convenience) Boston Cream Pie (assembled convenience) Club Roll Beverages
THURSDAY	Orange Juice Assorted Pastry Variations Beverages	Monte Carlo Sandwich Potato Chips Palm Leaves Beverages	Grilled Liver (conveniences) w/bacon, onion rings, pineapple Lyonnaise Potato (convenience) Lima Beans Lettuce Wedge Cheese Cake (refrigerator) Finger Roll Beverages
FRIDAY	Orange Juice Assorted Pastry Variations Beverages	Italian Fish Sandwich (convenience) Cole-Slaw—Potato Chips Pudding Variations (convenience) Beverages	Roast Round of Beef (convenience) Brown Gravy (convenience) Browned Potato Broiled Tomato Cottage Cheese w/fruit Yellow Cake (convenience) Snow Flake Roll (base mix) Beverages

FIGURE I. Menu for Food Preparation

Interpersonal Skills

The interpersonal skill segment of the workshop sought to have participants experience teacher behaviors that facilitate humanized teacher-student relationships in vocational school environments. To that end, we assumed

1. that the participants in this workshop who are involved at various affective and cognitive levels will more readily transfer what they learn to their classroom,
2. that knowledge can lead to changes in feelings, but more importantly it is feelings which lead to action,
3. that if persons can conceptualize about what they have learned in experiential learning sessions, they will be able to transfer these learnings to other situations,
4. that the responsibility for learning rests with the learner,
5. that it is the responsibility of the teacher to create an environment which facilitates learning—an environment where students will want to assume responsibility (defined as ownership of one's behavior and the ability to respond) for their own learning,
6. that learning is an active process and it is the responsibility of the teacher to create experiences which will enable the student to become actively involved in this process,
7. that the process used by the teacher and students to arrive at a given objective is as important as the product or outcome, and
8. that experience precedes conceptualization *not vice-versa* and these experiences must have both affective and cognitive components.

Participants were told that they would be trying to understand themselves as a group. This task was based on the hypothesis that the kinds of behaviors presenting the most difficulty for each teacher in a classroom would also present the most difficulty for each person in a group setting. Therefore, a group's attitudes, values, behaviors, and interactions made up a large part of the subject matter or content of the classroom. To accomplish this task, three methods were used extensively:

1. Participants served as process observers and reported their observations to the group.
2. Leaders used the T-group method for group feedback.
3. Group-on-group methods were also used (e.g., a small group, as in the fishbowl technique, interacting within the larger group).

Participants were involved in the initial goal setting for the workshop. Each person contributed three to five objectives stating what s/he wished to learn from this part of the workshop. Participants then examined these objectives as a group and rank-ordered them to establish an agenda with priorities for the two weeks of the workshop.

Two leaders designed experiential learning sessions for the first three meetings to serve as a role model for designing other experiential learning sessions. Activities included goal setting exercises, brainstorming methods and sessions, and exercises in value-clarification. The leaders' prime responsibility for the remaining sessions was to act as resource persons who helped the participants design, implement, and evaluate different learning strategies.

Participants were divided into teams which chose one or two objectives for which they designed experiential learning activities to include the other workshop participants.

Participants and leaders were asked to write a one-page reaction paper to the class sessions. Each reaction report, covering two sessions and limited to one page, was duplicated for each workshop participant. Criteria which provided some conceptual structure for the reaction reports are included in Figure II. A more detailed description of these criteria is included in Figure III.

The reaction reports were evaluated using the Content Analysis Evaluation Form (CAEF) developed by Dorothy Mitstifer and John Bellanti which appears in Figure II. Throughout the workshop participants had individual and small group conferences with the leaders to discuss the extent of their progress.

The Content Analysis Evaluation Form was used to analyze the differences between the first and fifth reaction papers. A summary of the findings are presented below:

Part I: Awareness and Acceptance. As participants progressed through the workshop, there was an increase in awareness of their own behaviors and how these behaviors affected group interaction. There was also an increased awareness of the kinds of teaching behaviors which facilitate learning, i.e., genuineness, acceptance, empathic understanding, shared authority, and viewing the leaders as persons first and teachers second. The findings suggest that there was a greater acceptance of self, of group process, and of those behaviors which facilitate learning.

EVALUATION FORM

	1	2	3	4	5		1	2	3	4	5
Awareness/Acceptance (awareness x) (acceptance xx)						Action					
Insight into:						Evidence of:					
Self						Personal disclosure (feelings & thoughts)					
Role (group and/or job)						Empathic understanding					
Group process						Diagnostic capability (individual & group needs and behaviors)					
Readings						Cooperation					
Blocks to learning						Risk-taking behaviors					
Facilitators to learning											
Subtotal						Subtotal					
						TOTAL SCORE					

FIGURE II. Reaction Papers: Content Analysis

SELF: Attempting to see oneself as others do.
ROLE: The part one plays as an integral member of a group.
GROUP PROCESS: The flow of events which determine how a group develops and is defined.
READINGS: The ability to identify concepts in prescribed readings and generalize to the present individual or group experience.
BLOCKS TO LEARNING: The processes by which experiences and interactions inhibit cognitive and affective growth.
FACILITATORS TO LEARNING: The processes by which experiences and interactions help persons work toward cognitive and affective growth.
GENUINE PERSONAL DISCLOSURE: Evidence of communicating both thoughts and feelings in a manner which suggests that the verbal and non-verbal behaviors of the person are congruent.
EMPATHIC UNDERSTANDING: The ability to experience the moment to moment world of another person and to verbally communicate this experience.
DIAGNOSTIC CAPABILITY (individual and group needs and behaviors): The ability to understand and to label the various individual and group dynamics present in group interaction.
COOPERATION: Behaviors which suggest the person is interacting in a manner which aids in the completion of group tasks.
RISK-TAKING BEHAVIOR: Initiating behaviors which a person values but which are seen as threatening.

FIGURE III. Description of Terms.

Part II: Action. The only observable difference in the action dimensions in the reaction reports were in the participants' abilities to identify the dynamics which were occurring in the group and to communicate these in a more genuine manner.

The CAEF (Figure II) is a new instrument. The only validity present at this time is face and construct validity. The purpose of the instrument is to identify categories of written responses on classroom reaction papers.

The clearest information about the interpersonal skills portion of the workshop comes from the comments expressed in class and written on the reaction papers.

The first set of reaction papers expressed some apprehension about this part of the workshop. Participants were bothered by the lack of formal classroom structure, they were unsure of what was expected of them or what they expected of themselves and each other. Examples from the reaction papers are listed below.

> Yet, the relaxed atmosphere created a problem in itself since the experience of such close communication with my "superiors" is a new and therefore threatening situation.
>
> Terms such as values, group dynamics, roles, etc., usually turn me off. . . .
>
> Expressions of feelings haven't worked well with people who are close to me. I feel a bit negativistic about some of this.
>
> I dislike dividing into groups to do vague tasks such as setting goals.
>
> I feel threatened in that the little I know about psychology leads me to read between the lines . . . see what he is going to do to us. I like to know if I am being manipulated.

Other comments on the first reaction papers identified the more obvious dynamic operating in this group.

We seem to be divided into two groups, the old members who have been in this workshop before and the new members or first timers.

It is X who notes that we have formed two groups (old and new) and that we ought to mix more. I feel ready now and so I joined the new group.

Comments like the above suggest an initial discomfort and confusion when students are asked to help structure their own learning experiences. For most participants this is a new or different approach to the teaching-learning process. Also, when participants are included in the setting of goals and face the responsibility of jointly structuring their learning experiences, they tend to experience ambivalence and become cautious with this new freedom to learn in the classroom. They must face themselves as the learners they are. For many, this process is painful with the realization that most of their learning has been directed by others rather than self-directed. The responsibility for self-directed learning can produce feelings of apprehension until students can build up enough trust in the leaders, themselves, and the process itself to feel more secure in what they are doing and what they want from these new learning opportunities.

Part of the initial apprehension is related to the behaviors of the leaders. In most teacher-structured classrooms the teacher's behaviors and the student's expectations are more clearly understood and, hence, more predictable. When the leaders, by their behaviors, refuse to fall into this stereotypic role, they are viewed with suspicion. These behaviors are viewed as unreal or temporary at best. A certain amount of testing goes on to obtain valid data which confirm that the leaders are genuine in their intent to facilitate learning. It took two two-hour sessions before a reasonable degree of leader credibility could be established.

Two weeks, or twenty classroom hours later the comments written on the reaction papers took on a different tone. Examples:

For me it has been an inspiring experience—one that won't fade from my memory instantly. I have gained more than I have given.

I came into this workshop feeling that I had little to give and everything to gain—and I'm leaving feeling that I did make some contributions as well as receive a wealth of ideas, knowledge, and stimulation. Thanks, everyone, for a very rewarding two weeks in my life.

Which reaction paper is harder to write? The first or the last? Surely the last?

There have been a few highs and some lows during the past two weeks. There has been growth, grafting, pruning, and trimming out of the debris. And like the vines in the slides this afternoon, may we all go on to a new and healthy flowering . . . taking with us a new awareness and a better perception.

As I think early this morning and examine my feelings inside, I can honestly say I have learned something from everyone in our workshop.

The writings express a more positive set (acceptance) to learning and a caring for one another. The belief that everyone contributed to the learning process and that the participants are viewed as teacher-learners rather than differentiating between the teacher and the learner suggest the participants value this cooperative venture in learning and are more likely to implement it when they return to their vocational classes.

Not everyone achieved the same outcomes or left with the same attitudes about his or her participation in this section of the workshop, but the different rates of growth and different directions of growth were appreciated by all, even those who gave less and perhaps received less.

Anyone who imagines that all fruits ripen at the same time as the strawberries knows nothing about grapes, and I might add knows nothing about the taste of wine.

What I want to be able to accept is myself. I've changed in these two weeks, I want to change; yet I don't know if I will like this change.

From the beginning of the workshop I expressed skepticism about the genuineness of the participants. . . . No doubt this feeling has been misinterpreted by some as apathy. This skepticism has not been totally erased, as I believe some are still playing roles that are not themselves, even though they may not be aware of the fact.

. . . If I had more time my growth would be greater. What you have given me will benefit others—and myself. When nurtured by time.

In each of these statements there is an acceptance of self and a desire to continue to grow. There is an openness in the sharing and a genuineness which was not present in the first reaction papers. The last papers were written not with the intent to impress the teacher, but to express one's self.

It is difficult to sum up the various learnings of each participant, yet one reaction paper captures some threads of insight which perhaps have woven this group together.

> The art of helping, or the process of helping, is not for the purpose of the helper to feel good that he has helped someone nor is it for the purpose of having the person you are helping to have good feelings about you. The process of really helping is having the person who is being helped feel better, more accepting of himself. If the latter does not occur, no matter how painful the process, genuine helping has not occurred.

Additions to the Basic Workshop Recipe

A fourth objective for the workshop tuned a portion of the workshop time to the exploration of ways of improving food service programs through (1) the involvement of the community and the industry, (2) encouraging leadership and the professional development of teachers, and (3) increasing awareness of educational materials, organizations, and industrial leaders concerned with food service education.

The workshop had as guest lecturers and demonstrators, two representatives of the food service industry, and over 100 companies servicing the food service industry were solicited by mail to contribute current teaching aids and materials. The majority of companies responded and several long tables in the workshop rooms were filled with materials for use by the staff and participants.

Discussions centered on professional organizations such as the Council on Hotel, Restaurant and Institutional Education and the National Restaurant Association which bear relevance to food service education. Debates were held on the possibilities of involving educational programs with community-based projects such as meals-on-wheels, and providing banquet or catering services for community and service organizations.

Workshop Evaluation

Overall evaluation of the workshop was accomplished through the use of the Goal Assessment Survey. This device comprised 154 goal statements set forth by workshop participants. Participants responded to each goal on two rating scales: the first scale represented the degree of goal meaningfulness and the second indicated degree of goal achievement. The device was administered at the end of the first week of the workshop and again at the end of the workshop. The mean scores for the two administrations and mean changes identified by the device over the workshop, were analyzed, grouping goals by four content areas: evaluation skills, food production skills, interpersonal skills, and miscellaneous teaching skills.

Table 1 presents mean change scores on meaningfulness and achievement from the two administrations of the device grouped by content areas of goal statements. All mean changes for each content area were positive. As Table 1 illustrates, participants indicated higher degrees of goal achievement in evaluation and miscellaneous teaching skills than in food production and interpersonal skills. Statistical analyses of significance in change was not performed on these data. Table 2 indicates proportions of goal items in each of the four areas which registered positive changes in goal achievement and positive changes of .50 or above.

TABLE 1. Mean Mid and Post Workshop Change in Meaningfulness and Achievement of Goals Grouped in Four Content Areas of Participants on the Goal Assessment Survey

		Mean Change	
Number of Goals	Content Area	Meaningfulness	Achievement
52	Evaluation skills	+.09	+.65
50	Food production skills	+.08	+.39
31	Interpersonal skills	+.11	+.37
21	Miscellaneous teaching skills	+.10	+.50

TABLE 2. Proportion of Goal Items on the Goal Assessment Survey Indicating Mean Change in Achievement of +.50 or Above

		Proportions	
Number of Goals	Content Area	.50 and Above	Positive Change
52	Evaluation skills	.71	1.00
50	Food production skills	.28	.94
31	Interpersonal skills	.29	.87
21	Miscellaneous teaching skills	.61	.90

Results of the Goal Assessment Survey can be generalized to suggest that participants indicated the workshop experiences to be beneficial in meeting their objectives.

The content validity of the Goal Assessment Survey is assumed since the items comprised goal statements generated from and set forth by participants. The device is lengthy and ponderous. Many goals overlap or duplicate others since each participant's goals were included. Efforts to refine the device to reduce its length and content overlap were not possible within the duration of the workshop.

In Summary

The workshop appears to have been reasonably successful in accomplishing its proposed objectives. The concentration upon three skill areas provided for the development of a group of participants who worked well together as well as opportunities to change pace daily from theoretical study to practical effort to social skills. Participants seemed to enjoy and indicate benefit from the workshop.

Using as staff members some participants from past workshops suggested one approach to career development in food service teacher education and may have provided the motivation for the professional development of teachers.

A workshop designed to update and bring together from a region educational personnel who share common interests, problems and concerns seems to be a means of providing impetus for professional development.

It is difficult for individuals to set aside two weeks to devote to a workshop such as this. Alternatives to the scheduling and structure of such a workshop therefore may need to be explored. One alternative structure may be to offer the workshop over a longer period as a regular summer term course, although the retreat atmosphere offers some benefits which may be lost with such a schedule.

The future of food service teacher education appears to be a larger issue related to this workshop. Funding of this and previous workshops has been uncertain. Staff for the workshop consists of persons who are committed to establishing food service teacher education and who sustain their commitment while operating in related positions which provide little or no time to devote to this matter. The resolution of this larger issue is needed to formalize food service teacher education as a legitimate responsibility and function of vocational education in Pennsylvania.

We further need to attract as co-participants some of the professional organizations associated with the industry—Council on Hotel, Restaurant and Institutional Education, Pennsylvania Restaurant Association, National Restaurant Association, Pennsylvania Chefs Association, and Club Managers Association. There needs to be some dialogue between these organizations and the teacher to provide a clearer understanding of the changes affecting the development of food service education in the state and nation.

Standards for vocational food service education in Pennsylvania in terms of program focus and content seem to be evolving. Several educators have assumed leadership roles in developing curriculum and related educational materials for this subject matter area. The relationships formed in this and previous workshops afford food service educators with a network of peers throughout the state who can provide support and assistance in the maintenance and development of each program.

TEACHING NUTRITION TO CHANGE FOOD HABITS

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Teenagers, especially teenage girls, appear to make the poorest food choices in our society. Calcium and iron deficiencies exist to a large degree among teenagers, followed closely by insufficient amounts of ascorbic acid and vitamin A.[1] Harris[2] found similar evidence of nutrient deficiency in a survey of breakfasts eaten by high school students. Many of the students did not have a sufficient intake of vitamin C and over 50 percent of the students did not drink milk. In addition to nutrient deficiencies, overweight and obesity are problems of teenagers as well as older people.[3] Stare and Dwyer[4] stressed that obesity in teenagers should be of special concern because of the probability that it will continue to exist in adulthood.

Food Habits of Teenagers

Teachers of nutrition are the first to admit that the desired results concerning changed food habits in teenagers have not been realized in any consistent fashion. In most cases, when food habits of adolescents have been investigated, dietary practices have been found to be unsatisfactory.

Causes of inadequate nutrition are numerous, but one significant reason is lack of knowledge concerning nutrition.[5] Participants in the National Nutrition Education Conference in Washington, D.C., in November 1971, agreed that the poor dietary practices of adolescents stem not only from inadequate nutritional knowledge but from insufficient motivation as well.[6] The role of an adequate diet in maintaining the health and well-being of an individual and the rewards of practicing good habits of food selection and meeting nutritive needs through an adequate diet are essential facts which need to be stressed in nutrition education.[7]

Importance of Quality Nutrition Education

The imperative for improved programs of nutrition education cannot be ignored. Brown[8] called for "accelerated nutritional programs with meaningful information." Because much of today's diet especially for teenagers is composed of snack foods, people need to be able to compare the nutritive values of various snacks. Concern for the health of future generations prompted Inzer[9] to point out the need for quality education in nutrition for all youth. In the recommendations of the White House Conference on Food, Nutrition and Health,[10] the importance of nutrition education was emphasized.

Because proper nutrition determines to a great extent the physical, mental, and emotional well-being of adolescents today, and of themselves and their children in the future,

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[1]"Nutritional Implications of Some Problems of Adolescents," *Dairy Council Digest,* 38 (1967), 25-28.

[2]W. H. Harris, "A Survey of Breakfasts Eaten by High School Students," *Journal of School Health,* 40 (1970), 323-325.

[3]J. A. Spargo, F. Heald, and P. S. Peckos, "Adolescent Obesity," *Nutrition Today,* 1 (1966), 2-9; M. Lowenberg, E. N. Todhunter, E. D. Wilson, M. C. Feeney, and J. R. Savage, *Food and Man* (New York: John Wiley and Sons, 1968).

[4]F. J. Stare and J. Dwyer, "An Eye to the Future: Healthy Eating for Teenagers," *Journal of School Health,* 39 (1969), 595-599.

[5]E. Eppright, M. Pattison, and H. Barbour, *Teaching Nutrition* (Ames, Iowa: Iowa State University Press, 1963); R. P. Devadas,"Social and Cultural Factors Influencing Malnutrition,"*Journal of Home Economics,* 62 (1970), 164-171.

[6]"Nutrition Education for Youth," *Journal of Home Economics,* 64 (1972), 34-38.

[7]E. A. Martin, *Nutrition Education in Action—A Guide for Teachers* (New York: Holt, Rinehart and Winston, 1963); H. T. Spitze, "Accent on Nutrition for Consumers," *Illinois Teacher,* XIV (1970), 1-45.

[8]E. L. Brown, "Nutrition Content—The Basic Conceptual Framework," *Illinois Teacher,* XIV (1970), 4.

[9]I. C. Inzer, "A Study of Nutrition in Pregnancy," *Journal of School Health,* 40 (1970), 392-395.

[10]*White House Conference on Food, Nutrition and Health, Final Report* (Washington, D.C.: United States Government Printing Office, 1970).

there is a need for methods for teaching nutrition at the secondary level which will result in changes in behavior concerning food selection. Eppright, Pattison, and Barbour in *Teaching Nutrition*[11] emphasize that good food habits are the result of knowledge concerning nutrition and the application of that knowledge.

A Method for Teaching Nutrition

One behavioral approach for teaching nutrition is based on the premise that an increase in knowledge concerning nutrition should bring about a change in food habits.

The objectives for each unit state what the student is expected to do, how he will do it, the minimum acceptable level of proficiency, and how he will be evaluated. For example, given a list of foods which a teenager may have eaten in a day, the student will be able to evaluate with 100% accuracy the adequacy of the diet in terms of the Basic Four Food Guide. The objectives for each lesson are made known to the student before teaching begins, so s/he knows exactly what is expected of him/her.

Assessing Daily Diets

Without prior warning students are asked to write down everything they ate or drank the previous day, from the time they got up until they went to bed. This is done for three days so that students cannot claim that a one day dietary is not representative of what they usually eat. The dietaries are turned in to the teacher each day and are not discussed. Students are assured that the quality or lack of quality of their diets will not influence their grade in the course, and they are usually honest in recording the foods and beverages they consume.

After some study of nutrition, the three daily dietaries are returned, and each student assesses his/her own dietaries using the Basic Four as a guide. Students can readily see where improvements need to be made in their diets, usually by adding fruits and vegetables. Girls often need more servings of milk foods in addition.

Assessing Knowledge of Nutrition

In addition to the dietaries, the students are asked to respond to a true-false pre-test for assessing nutritional knowledge and to discover the areas of nutrition where they have either no knowledge or may have misconceptions concerning nutrition information. The same test as a final examination enables them to see their own growth.

Assessing Food Likes and Dislikes

Students are given a list of a variety of meats, breads, cereals, fruits, vegetables, and various kinds of milk products. They are asked to check whether they like the food on a 5-point scale. The responses are tallied, and the results are used to plan learning experiences which will encourage the students to include some of the less popular but highly nutritious foods in their diets.

Activities for Learning

To help the students increase consumption of foods they are lacking, they are given many opportunities to try new foods or to learn to prepare familiar foods in different ways. For example, when studying milk, a tasting party is held. Students are asked to taste samples of unmarked containers of milk. After tasting each one they check "yes" if they are willing to drink it or "no" if they are unwilling to drink it. Then the kinds of milk (whole milk, 2% butterfat milk, skim milk, dry milk, and buttermilk) are revealed to them. There is always surprise among the students when they find that they actually do not object to the taste of reconstituted dry milk if they do not know what it is.

Another activity involves investigating ways to include milk in the diet when one does not like to drink milk. The students prepare a variety of meals and desserts which include milk products.

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[11]E. Eppright, M. Pattison, and H. Barbour, *Teaching Nutrition* (Ames, Iowa: Iowa University Press, 1963).

Laboratories are planned to include various ways of preparing new fruits and vegetables in order to achieve acceptance.

Meats, breads, and cereals are not neglected, but less emphasis is placed on these, since the intake of these foods is usually adequate.

Identifying Changes in Knowledge and Food Habits

At the conclusion of the nutrition unit the students again are asked to record foods they have eaten for three days. Changes in food habits can easily be examined. The final exam score is compared to the pre-test score to determine gains in nutrition knowledge.

During the units students are asked once a week to list any new foods they have tried, other than those eaten in class, or any foods they have begun consuming in larger amounts. This procedure serves as an indicator of prospective changes in food habits and also serves as a reminder to the students to try new foods.

Habits of food selection which one has acquired over a number of years cannot be expected to change radically in a brief span of time except under unusual circumstances. For teenagers who enjoy abundant health, the need to change food habits may not become readily apparent. However, nutrition educators can hope that knowledge acquired at one time may foster changes in behavior at a later time. This behavioral approach to teaching nutrition does help high school students become more aware of the benefits of good nutrition, and their experiences with a diversity of foods are broadened in the process.▲

MINI LESSONS FROM FDA

A kit of eight "mini lessons from FDA" on a variety of topics make available to teachers basic information about the Food and Drug Administration. The self-contained lessons provide adequate background for most teachers to use without further study. They are short, independent of one another, appropriate for inclusion in a variety of subject areas, and easily modified to grade level.

Topics for the "drop-in" lessons include: cosmetics, drug safety (prescription and over-the-counter), food safety, nutrition labeling, radiological health, and how to make a complaint. The lessons have been printed with black ink on white paper so they may be easily and clearly reproduced in quantities needed.

Teachers may request free kits from Food and Drug Administration (HFG-1), Office of Professional and Consumer Programs, 5600 Fishers Lane, Rockville, Maryland 20852, and should provide the following information: grade level, subject area, name, and address of school.

FDA is eager to hear from teachers regarding their appraisal of the mini lessons and their ideas on other lessons that are needed. Communications should be directed to

Dorothy F. Dunn
Regional Program Manager for Consumer Affairs
Food and Drug Administration, Region V
A-1945 Insurance Exchange Building
175 W. Jackson Blvd.
Chicago, Illinois 60604

On the following six pages we have reproduced one of the mini lessons to give readers a better idea of what they are like.

A MINI LESSON FROM FDA

A REPORT TO FDA

Topic: Business letter to FDA.

Level: Intermediate

Objective: The student will rewrite a business letter. He will prepare a letter, brief and to the point, using proper punctuation and form.

The student will realize that he has the opportunity to report harmful products to the FDA or other appropriate consumer protection agencies.

Skills: Letter writing, reference.

Materials:

- Jimmy Jones letter to FDA (use instant ditto to duplicate) (page 3)
- FDA CONSUMER Memo, "How You Can Report to FDA" (page 4)
- Reply from FDA District Director of Compliance Branch (page 6)

Procedure:

1. Provide each student with Jimmy's letter to FDA.

2. Post on the bulletin board a copy of "How You Can Report to FDA."

3. Have the students use the space between lines to correct errors, such as--

   a) eliminate useless -- words, phrases, sentences.

   b) make changes in -- wording, punctuation, form.

4. Have the class check the local telephone directory for an "FDA" address.

   Look under:

   a) U.S. Government,

   b) Department of Health, Education, and Welfare,

   c) Food and Drug Administration (FDA)

5. Have students re-write the letter from Jimmy Jones.

6. Share FDA's reply to Jimmy with the class. Read to the class and post on bulletin board.

7. Discuss other harmful products which could or should be reported to FDA or other consumer protection agencies. If there is no local FDA office, determine which agency could help a consumer.

Code: Test answers - page 2 (1-d; 2-b; 3-a, c, d, e, g, j, 1)

Follow Up:

1. Students practice skills in other writing exercises.

2. Students make reference to their responsibility to report harmful products to consumer protection agencies.

3. Students seek information by writing letters to manufacturers or government agencies. They share their replies with the class.

Evaluation:

Use the following for testing or discussion:

1. Which of these should a consumer contact if he buys an insanitary package of fresh ground beef?

   ___ (a) The President

   ___ (b) The Food and Drug Administration

   ___ (c) Better Business Bureau

   ___ (d) United States Department of Agriculture (USDA)

2. In a business letter to the FDA, which sentence is best:

   ___ (a) I went with my Mother to buy some eggs, milk, tuna fish and bread.

   ___ (b) Yesterday I bought a can of tuna fish that was spoiled.

   ___ (c) I saw a can of tuna fish at the store but it was spoiled.

   ___ (d) I went to the store but forgot to buy tuna fish so I had to go back later.

3. Check the unsafe or unwholesome products you should report to the Food and Drug Administration:

   ___ (a) peanut butter

   ___ (b) baby bed

   ___ (c) aspirin

   ___ (d) microwave ovens

   ___ (e) suntan lotion

   ___ (f) doll

   ___ (g) vaccine

   ___ (h) infant sleepwear

   ___ (i) round steak

   ___ (j) candy bar

   ___ (k) bicycle

   ___ (l) cereal

References: "We Want You to Know About Today's FDA" DHEW Publication No.(FDA) 74-1021

U.S. Department of Health, Education, and Welfare, Public Health Service
Food and Drug Administration, Region V
175 W. Jackson Boulevard, Room A-1945, Chicago, Illinois 60604

Pilot Project 974/G-1

126 Clearview Rd.
Greentown, Md. 20853
December 9, 1974

Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20852

Dear Sir:

Yesterday, at 12:00 pm, I went to the store for my Mother and bought a can of green beans, a half gallon of milk, and a package of macaroni. When I got home I noticed that the can of green beans was buldging. Because we learned about botulism last week in school, I am worried that this can of green beans and others like it maybe harmful.

The brand name is Sombrero, and it is produced by Beanstalk Product Incorporated, Houston, Texas. It has these numbers on the lid: HU576-212-8162. The store where I bought it is just down the street from my house at 216 Clearview Rd. It is called Johnson's Market. I have told Mr. Johnson about the bulging can of green beans and I returned the unopened can to him.

How will the FDA check to make sure that other cans goods from the same company are safe and will not poison anyone?

Thank you.

Sincerely,

Jimmy Jones

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION

District Office
900 Madison Avenue
Balitmore, Maryland 21201

December 12, 1974

Mr. Jimmy Jones
126 Clearview Road
Greentown, Maryland 20853

Dear Jimmy:

The letter which you sent to the Food and Drug Administration headquarters office has been referred to the Baltimore District Office which serves your city. I want to thank you for your prompt action in notifying both the store and FDA when you found a bulging can of green beans. Such prompt action can often help FDA in removing harmful or defective products from the market. Your letter contains all of the information we need to start an investigation.

In your letter you ask for a description of what we will do as a result of your complaint. The steps in an FDA investigation fall into three kinds of actions. First, we will visit the store in an effort to locate all of the cans with this code. Usually this leads us to a warehouse and other stores which sell this product. Second, we will collect cans with this code and other samples of suspicious looking cans. Third, and at the same time, other investigators will visit the manufacturer to find out if there are problems in the food processing plant.

Consumers often help us in our job of protecting people. By your actions you have joined those efforts. Please accept my thanks.

Should you have further questions related to the products that FDA regulates, or should you wish FDA publications address your letter of inquiry to the District Office which serves your geographic area.

Sincerely,

WILLIAM C. WHITE
Director, Compliance Branch

GPO 806-948-2

FDA Consumer MEMO

CURRENT AND USEFUL INFORMATION FROM THE FOOD AND DRUG ADMINISTRATION

HOW YOU CAN REPORT TO FDA

If you come across a food, drug, medical device or cosmetic that you believe may be mislabeled, insanitary, or otherwise harmful, you will perform a public service by reporting it to the Food and Drug Administration.

The information you supply to FDA can and often does lead to detection and correction of a violation. Many products have been recalled or removed from the market because of action initiated by a consumer.

FDA can't take legal action solely on the basis of your complaint, of course. But it will investigate promptly, in accordance with the requirements of the law. And if a hazard is found, FDA will seek to remedy the situation within the bounds of the law.

Here are some guidelines to follow in reporting hazards to FDA.

BEFORE YOU REPORT

Before you report to FDA about the possible hazards of a product, ask yourself these questions:

- Have I used the product as labeled?
- Did I follow the instructions carefully?
- Did an allergy contribute toward the bad effect?
- Was the product old when I opened it?

Make sure you've taken all these factors into consideration before you report a possible hazard to FDA. The hazard may lie in improper use of a product rather than in an inherent defect.

With a medicine, for example, you may suspect the product is harmful if you experience an unusual reaction. You should report this to your doctor immediately.

But the reaction may be a "side effect" rather than an indication of a defect. It may not be necessary to inform FDA about it. Your physician will be the best guide.

WHERE TO REPORT

You may refer your complaint in writing or by phone to the nearest FDA Field office or resident inspection station.

FDA has 10 Regional offices, 19 District offices, and 97 resident inspection stations throughout the United States. You can find the address and phone number of the nearest FDA office in the telephone directory under U.S. Government, Department of Health, Education, and Welfare, Food and Drug Administration.

If you wish, you may write about your complaint directly to FDA headquarters. **The address is Food and Drug Administration, 5600 Fishers Lane, Rockville, Maryland 20852.** The complaint will reach the correct person.

HOW TO REPORT

Report your grievance as soon as possible after it occurs. Give your name, address, telephone number, and directions on how to get to your home or place of business.

State clearly what appears to be wrong.

Describe in as much detail as possible the label of the product. Give any code marks that appear on the container. For example, markings on canned foods are usually embossed or stamped on the lid.

Give the name and address of the store where the article was bought, and the date of purchase.

Save whatever remains of the suspect product or the empty container for your doctor's guidance or possible examination by FDA.

Retain any unopened containers of the product you bought at the same time.

If an injury is involved, see your physician at once.

Report the suspect product to the manufacturer, packer, or distributor shown on the label, and to the store where you bought it.

FDA has limited jurisdiction over certain consumer products. If you have complaints about any of the following, these are the Federal agencies to inform:

- Suspected false advertising—*Federal Trade Commission.*
- Meat and poultry products—*U.S. Department of Agriculture.*
- Sanitation of restaurants—*local health authorities.*
- Products made and sold exclusively within a State—*local or State Health Department or similar law enforcement agency.*
- Suspected illegal sale of narcotics or dangerous drugs (such as stimulants, depressants, and hallucinogens)—*Drug Enforcement Administration, U.S. Department of Justice.*
- Unsolicited products by mail—*U.S. Postal Service.*
- Accidental poisonings—*Poison Control Centers.*
- Dispensing practices of pharmacists and drug prices—*State Board of Pharmacy.*
- Pesticides, air and water pollution—*Environmental Protection Agency.*
- Hazardous household products and toys—*Consumer Product Safety Commission.*

DHEW Publication No. (FDA) 74-1001

Today's FDA

The food you buy in a supermarket. Is it safe?

The nonprescription medicine you buy in your drug store. Does it work?

The color TV you have in your living room. Does it give off too much radiation?

These are some of the issues that people today are concerned about.

And these are the issues that the Food and Drug Administration deals with every day.

FDA is on the job, every day, carrying out its responsibilities on behalf of the American public, to assure that foods are safe, that medicines do work, that color TVs are safe. And more. Virtually every product you see in a supermarket or drug store is regulated by FDA.

Here are some facts about FDA, its activities, and how they relate to your personal safety in today's complex marketplace.

What FDA does

FDA performs hundreds of activities to help the public and to protect consumers. Some of these activities are:

- FDA inspects plants where foods, drugs, cosmetics or other products are made or stored to make sure good practices are being observed.
- FDA reviews and approves new drug applications and food additive petitions before new drugs or new food additives can be used.
- FDA approves every batch of insulin and antibiotics, and most color additives before they can be used.
- FDA sets standards for consumer products, such as foods that are made according to a set recipe (peanut butter, for example). FDA tests products to assure they meet Government standards.
- FDA is conducting a review of all prescription and non-prescription medicines, biological drugs and veterinary drugs now on the market. The goal is to make sure they are safe, effective and properly labeled.
- FDA develops regulations for proper labeling. For example, FDA developed new regulations requiring cosmetic ingredient labeling, and nutrition labeling on many foods.
- FDA works with the industries it regulates to help them develop better quality control procedures.
- FDA tests drugs regularly after approval to make sure they meet standards of potency, purity and quality.
- FDA issues public warnings when hazardous products have been identified.

DHEW Publication No. (FDA) 74-1021

What FDA can and cannot do

FDA carries out the responsibilities assigned to it by the Congress. Four laws authorize the majority of FDA activities:

- The Federal Food, Drug and Cosmetic Act requires that foods be safe and wholesome, that drugs be safe and effective, and that cosmetics and medical devices be safe. All these products must be properly labeled.
- The Fair Packaging and Labeling Act requires that labeling be honest and informative, so that shoppers may easily determine the best value.
- The Radiation Control for Health and Safety Act protects consumers from unnecessary exposure to radiation from x-ray machines and consumer products such as microwave ovens and color TVs.
- The Public Health Service Act establishes FDA's authority over vaccines, serums and other biological products. It also is the basis for FDA's programs on milk sanitation, shellfish sanitation, restaurant operations and interstate travel facilities.

Many misconceptions exist about FDA's legal authority.

FDA **can** prevent some products from being sold until they are proved safe. Examples are new drugs and new food additives.

FDA **cannot** prevent an unscrupulous person from selling some products, such as worthless medical devices or harmful cosmetics, until **after** they are actually marketed. The burden is on the FDA to prove such products are worthless or harmful.

FDA generally **can** act **only** against products sold in interstate commerce. A product made and sold solely within a state usually must be regulated by that state.

FDA **can** initiate removal of a product from the market when new scientific evidence reveals unacceptable or unexpected risks. For example, FDA banned hexachlorophene as an active ingredient based on new evidence showing an unacceptable risk.

FDA **cannot** recall a product. It can ask a manufacturer to do so, however, under the threat of legal action.

FDA **can** go to court to seize illegal products and to prosecute the manufacturer, packer or shipper of adulterated or mislabeled products.

FDA **can** take action against false and misleading labeling on the products it regulates.

FDA **cannot** control the price of any product.

FDA **cannot** directly regulate the advertising of any product except prescription drugs.

FDA **cannot** regulate cigarettes.

University of Illinois
at Urbana-Champaign

ILLINOIS TEACHER
351 Education Building
Urbana, Illinois 61801

Home Ec

Volume XX, No. 4
March/April 1977

ILLINOIS TEACHER
OF HOME ECONOMICS

FUTURISM AND HOME ECONOMICS

SEX ROLES AND HOME ECONOMICS

Page

HOME ECONOMICS EDUCATION · UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

A publication of the Division of Home Economics Education,
Department of Vocational and Technical Education,
College of Education, University of Illinois,
Urbana, Illinois 61801

Volume XX, No. 4, March/April 1977. Published five times each academic year. Subscriptions $7.50 per year, $21 for three years; Canada, $8.50 per year, $24 for three years; Foreign, $10 per year, $27 for three years. Single copies $1.75. Special $5 per year ($7 foreign) for undergraduate and graduate students when ordered by teacher educator on forms available from ILLINOIS TEACHER office.

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Foreword

This issue of ILLINOIS TEACHER is an attempt to look at the present and future in relation to sex roles, especially the new legislation ["Title IX"] and how it affects home economics, although we are including a few articles on other subjects.

A glance at the Table of Contents will reveal articles about the legislation, about teaching coeducational classes [and that's the norm now for **all** *classes], and about the home economics teacher's role in eliminating sexism in the entire school. An excerpt from an HEEA publication, "Changing Societal Roles and Teaching" introduces a resource with many teaching activities, and an article on assertiveness may help prepare us to do the job that needs to be done.*

A reprint from the World Future Society journal gives us something new to think about for family financial organization, and articles from Kenya and Denmark add to our knowledge of home economics around the world. I hope too that they will make you want to join the International Federation of Home Economics [via AHEA].

Attitudes toward occupational education in home economics and toward careers for college females are discussed in two additional articles, and we are asked to think again about educating "the whole person" in a third.

We hope readers will be stimulated to new thinking and new action as they read this issue and that we'll hear from them with comments about this and other issues this year.

We especially hope you'll tear out the insert in the center of this issue and answer the two questions posed there.

The Editor

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Whatever the details of future arrangements, the global economic order and the struggle to change it will influence the lives of women. In the United States and in the rest of the industrialized world, evolving change may mean a slowing economy and pressures for "simpler" lifestyles. Women, in their roles as homemakers and nurturers, will be given the main responsibility for making real this simpler lifestyle in daily life. They will be asked to change patterns of consumption and also to deal with the psychological and emotional impact a changing economy will have on families. In addition, their own economic situations will be subjected to changes and constraints, including different employment opportunities. For women in the developing world, the new order may mean a better standard of living—more food, educational and employment opportunities. But such improvement for them will not be automatic because women have little power and their concerns are low priority. They will have to work for any gains that are made. (From Mary P. Burke, Women and World Economics: Some Suggestions for a More Creative Role for Women in World Development, in November 1976 Memorandum of the Center of Concern, 3700 13th Street, N.W., Washington, D.C. 20017.)

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Alberta M. Dobry, Ph.D.
Chairperson, Department of
Home Economics Education
North Dakota State University

The ideas in this article stem from an EPDA project "Planning and Evaluating Needs for Teaching Coeducational Vocational Consumer and Homemaking Programs at the Secondary Level" directed by Dr. Dobry for home economics cooperating teachers in North Dakota. Portions of a presentation "Preparation of Teachers and Curriculum for Co-Ed Programs" which was based on the EPDA project and given at the National Vocational Home Economics Educators Conference held in Kansas City, Missouri, last April are also included in the article.

TITLE IX
What's all the fuss about?

For a long time now home economics teachers have faced both male and female students in their classes. Thus, when Title IX of the Education Amendments of 1972 was initiated, many teachers wondered what all the fuss was about. Investigation into the question yields some serious considerations.

THE THRUST OF TITLE IX

The title IX regulations which amend portions of the Civil Rights Act of 1964 prohibit sex discrimination in federally-assisted education programs.[1] The law clearly requires that inequitable educational practices in specified areas will have to be revised or eliminated. The Office of Civil Rights, which is a component of the enforcement process, has cited elementary and secondary institutions as a priority target area in their independent investigatory program. One of the focal points specifically cited for investigation was student access to class offerings.[2] Thus, those classes which have an enrollment primarily of one sex will be highly visible and subject to questions concerning discriminatory practices. Since home economics has been traditionally viewed as a single-sex discipline, we may expect our programs to be included in the target areas for investigation.

As one of the service areas in vocational education, home economics programs may face additional scrutiny. Testimony presenting strong allegations of sex bias among persons responsible for vocational education was given during the Congressional Hearing on Sex Discrimination and Sex Stereotyping in Vocational Education in 1975.[3] Of significance was the evidence which indicated that, although vocational educators have previously professed open enrollment policies, their sex-role biased assumptions have resulted in unconscious sex discrimination. Thus, one conclusion from the Congressional hearings was that students have been subtly subjected to remaining in traditionally defined sex-role areas in vocational education.[4]

IMPLICATIONS OF TITLE IX REGULATIONS

Close examination of the Title IX regulations revealed that there are a number of implications for home economics programs. The following guideline questions have been developed to assist teachers in the assessment of possible sex discrimination practices in relation to their programs.

1. Is there sex discrimination in course requirements for graduation?
There is a particular need for reviewing policies of junior high school programs in terms of this question. Frequently such programs require home economics for female students but not for male students.

2. Is there sex discrimination in course titles?
Specialized or semester course titles frequently imply that a course is designated for a single sex. Such titles in need of revision would include "Bachelor Living" or "Bachelor Survival" indicated for males only, or "Lingerie Sewing" indicated for females only.

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[1]Title IX, Prohibition of Sex Discrimination, Education Amendments of 1972. *Public Law* 92-318, S.659, June 23, 1972.

[2]"Title IX," *The School Administrator,* 32(7) (1975), 9-12.

[3]U.S., Congress, House, Committee on Education and Labor, Subcommittee on Elementary, Secondary, and Vocational Education, *Sex Discrimination and Sex Stereotyping in Vocational Education,* Hearings, Washington, D.C., March 17, April 21, 28, 1975.

[4]John F. Jennings, "Emerging Issues in Vocational Education," *American Vocational Journal,* 50(6) (1975), 29-32.

3. Is there sex discrimination in course prerequisites and/or admission standards?

Attention to the specialized semester course policies at the senior high school level is required in terms of course prerequisites. The practice of requiring the comprehensive Homemaking I course as a prerequisite to semester courses for females but not for males is viewed as a discriminatory practice.

4. Is there sex discrimination in course requirements for passing?

The answer to this question requires a review of course descriptions and objectives. For example, clothing and textile courses which include outcomes such as the construction of a dress imply single-sex involvement. Another type of discrimination is to provide different sets of course requirements for each sex. This practice has frequently occurred with male-only and female-only classes. An example would be to require females to study both the principles of nutrition and food preparation while only requiring males to study food preparation.

5. Is there sex discrimination in course recruitment?

The subtle messages conveyed through pictures, illustrations, and sex-referenced words (e.g., he, she, girls, boys) used in brochures, flyers and announcements frequently express sex discrimination. Other recruitment practices of posting course notices in female restrooms or making course offering announcements in female physical education classes only are also discriminatory acts in need of revision.

6. Is there sex discrimination in extra-curricular activities?

Co-curricular activities also fall within the scope of this question. This includes the access to, participation in, and eligibility for membership in the FHA/HERO organization.

7. Is there sex discrimination in the required regulations for students on the basis of pregnancy, marital, or parental status?

Separate offerings for such groups as unwed mothers or married teen-agers fall into this category. Although schools are permitted to have such programs, they are prohibited from requiring them or from selectively encouraging participation in them.

A denouncement of the idea that home economists practice discrimination or perpetuate sex-role biases may be premature until after analysis has been made of the following:

1. What do we say?
2. What do we do?
3. What teaching materials do we use?
4. What kind of an environment do we create?

However unintentional, home economists may be surprised at how well they have been socialized into a sex-biased perspective.

THE IMPACT OF UNCONSCIOUS PHRASES

If it is correct to assume that most sex discrimination in home economics programs is practiced unconsciously and is based on stereotyped sex-role assumptions, then it may also follow that some of the assumptions are made unconsciously as well. The values and assumptions of our culture are transmitted through subtleties. Therefore, they may go unrecognized by even the most conscientious teacher.

Stereotyped sex-role assumptions are evidenced in a variety of ways. One way is through the choice of words and the context in which words are used.

If individuals have been socialized to conform with traditional sex-role expectations, then there is a tendency for their choice of terms to reflect that orientation. Once learned, many terms and phrases continue to be used unconsciously out of habit. Thus, it behooves home economics teachers to become alert to the subtle messages communicated indirectly through their choice of words. For instance, whether or not classes are composed of all females, when home economics teachers refer to their students as "my girls" they reinforce the idea that home economics is for "girls" only. No matter how unconscious, this is an example of a subtle means of discrimination.

Subtle role prescriptions may also be made through choice of terms. One example is use of the term "mother" rather than "parent" in reference to caring for children. Another is referring to fathers as *the* breadwinners which implies that mothers do not fill this role.

A different type of example is use of the words "housewife" and "homemaker" as interchangeable terms. Since housewives are clearly only female, the interchangeable use of the terms indicates that the sex restriction applies to homemakers as well.

Once alert to the choice of terms used, then conceptualization of those terms needs to be examined. Since the consumer and homemaking aspect of home economics is philosophically based on the preparation of students for the occupation of homemaker, the subtle messages conveyed in relation to the role of a homemaker are crucial in terms of sex-role biases.

In what context is the reference to a homemaker made? Does it really include both males and females? If so, is the idea clearly communicated? Further, are contextual references made in terms of the full-time homemaker, the part-time homemaker, or both? If the contextual reference is restricted to the full-time homemaker, or if reference to the part-time homemaker is included only on an incidental basis, or only in an isolated unit of study, then the trap of sex-role stereotyping is an easy one to fall into.

The field of home economics has given a great deal of attention to the dual role of women. This is fine. There is no quarrel with this idea (except perhaps that it is probably a multiple rather than dual role). The context is usually in terms of being a homemaker and a wage-earner. But, how about the dual role of men? The few times this idea does appear in print the context is usually either in terms of the father/breadwinner role or the father/husband role—never the homemaker/wage-earner role. If we really believe that a homemaker may be of either sex, then there appears to be a need for a readjustment in the total perspective taken toward the concept of homemaker.

THE STEREOTYPE TRAP

Stereotyped sex-role messages are pervasive. Convincing messages surround us daily. Such media as billboards, comic books, magazines, newspapers, radio, and television provide potent influences on sex-role behavior through advertisements, cartoons, and stories.

In an advertisement for Brand X diapers, the primary message is that Brand X is best. However, the ad will convey a subtle message if it shows a female diapering the baby. Through this subtle message individuals learn that females are the ones who diaper babies. A consistent pattern of subtle messages reinforces the learning. The fact that films, illustrations, pictures, and photographs serve as representations of reality make them easily and quickly understood. Thus, the impact of multiple exposure to visual sex-role images is an effective teacher. Unfortunately what is learned is specific role definitions for each sex and that imposes frustrating limitations and constraints on both sexes.[5]

SEX BIAS IN TEXTBOOKS

Although somewhat more subtle, educational resources tend to convey equally appalling messages. Recent studies have shown that textbooks are one of the big offenders in promoting negative sex-role stereotypes.

A three-year study on sex-biased images in textbooks was carried out by Weitzman and Rizzo.[6] Their analysis focused on the latent content (subtle messages) of the most widely used textbook series in the United States in each of five subject areas. The areas were science, mathematics, reading, spelling, and social studies.

An overall finding from the study showed that although females comprise 51 percent of the population, they were only found in 31 percent of the total textbook illustrations. Thus, in addition to negative stereotyping, sex bias may also be indicated by omission.

When looking at sex differences by grade level, it was found that the percentage of females illustrated varies by grade level. In all the textbooks combined, females comprised one-third of the illustrations at the second grade level but only one-fifth of the total by the sixth grade level. This leads to the conclusion that as textbooks increase in sophistication females become less numerous as role models in textbooks.

The textbooks were also examined for illustrations of sex differences in activities. Males were portrayed as active, skillful, and adventuresome. Whereas, females were typically shown as passive—usually as watching and waiting for males. Males were depicted as intelligent and as mastering work-related skills. On the other hand, females were shown in

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[5] Allison Rossett, Diane Krabbenhoft, and Herbert H. Lehman, "Photography and Expanded Sex Role Images," *Journal of Teacher Education*, 26(4) (Winter 1975), 345.

[6] Lenore J. Weitzman and Diane Rizzo, *Biased Textbooks* (Washington, D.C.: The National Foundation for the Improvement of Education, 1974).

domestic activities or in grooming themselves, trying on clothes, and shopping. The conclusion from these findings is that textbooks encourage both sexes to limit their development.

Adult males and females illustrated in textbooks were found to be even more stereotyped. Only a few adult females were shown outside the home, but adult males were portrayed in over 150 occupational roles.

Covert messages also came across in subject areas. In the science series 74 percent of the pictures were of males. Even mathematical problems frequently focused on sex-role stereotypes. Males divided money and females divided pies. Further noted was that there were mathematical problems in which females were paid less than males for the same work illustrated. The researchers concluded that after studying textbooks for three years, children were being crippled by the latent messages in them.

According to Hutton,[7] equal concern for the textbooks in home economics seems to be justified. She evaluated sex-role illustrations in six junior high school home economics textbooks. All of the books portrayed a broad perspective of home economics. In general, her evaluation paralleled the findings of the previous study on the items common to both. One of the points made by Hutton was that most of the illustrations which included males fell into two areas: grooming and clothing selection. This seems to be fairly restrictive involvement in home economics for males. The findings leave no doubt that textbooks present a problem in terms of shifting to an unbiased coeducational perspective.

SEX-ROLE RELATED OBJECTS

Another difficulty in presenting an unbiased atmosphere is the physical properties found in most home economics classrooms. Objects and equipment tend to be associated with traditional sex roles. Students who have been socialized according to traditional role models tend to avoid environments that appear to be inconsistent with the expectations of their role. Thus, classroom surroundings filled with traditional female-role associated objects set up a barrier for potential male students. Home economics teachers could subdue the message conveyed by the sex-role related objects if they stored as many items as possible in storage units or at least placed them in the background. Sex-role related objects could be introduced at the appropriate times in a controlled learning context.

The additional tendency to make the appearance of a home economics classroom as home-like as possible also serves as a deterrent for some students. Male students who hold a firm belief that the home is a woman's place tend to reject home economics on the basis of preconceived ideas which are further reinforced by the home-like environmental features. Non-traditional-minded females may have the same general reaction.

AN APPROACH TO STUDENT SEX-ROLE BIASES

The fact that students have their own sex-role biases compounds the problem of implementing coeducational classes. Students do need to become aware of their sex-role biases. However, the indirect approach tends to be less threatening and more successful.

Observation of student behavior has led to the conclusion that from the student perspective it is somewhat acceptable to be wrong on a cognitive plane. But, to be wrong on an affective plane is threatening to individual beliefs, values, and in some cases, self-identity. Sex biases are rooted in a value system that originates from a cultural basis, but once integrated by the individual becomes highly personal.

To pose a threat to personal values and beliefs frequently elicits defensive behavior on the part of the student. As a protective measure the response is likely to be one of holding more firmly to well-established beliefs about sex roles. The teacher may be bombarded with a recital of reasons (or excuses) *for* the beliefs rather than a discussion *of* the beliefs.

To avoid this type of closure, the teacher might achieve greater success by approaching the sex-role stereotyping topic with a cognitive plane focus. One of the naturals for this is the child development area. An awareness of the subtle messages conveyed through children's toys and play materials could serve as a starting point. For example, in addition to assessing

[7]Sandra S. Hutton, "Sex-Role Illustrations in Junior High School Home Economics Textbooks," *Journal of Home Economics*, 68(2) (1976), 27-30.

the construction and complexity of a picture puzzle, the message conveyed in the picture could also be assessed. The same general idea could be applied to coloring books or story books. (As an aside it is interesting to note that, although children's materials may focus on pictures of animals, many of the animals appear in stereotyped sex-roles. *Suzie* Squirrel is likely to be pictured wearing an apron and baking nut bread while *Freddie* Fox is out rounding up the other male animals in the forest for a council meeting on some pending disaster.)

Once the subtle messages have been identified and the cultural influences explained, then the stage is usually set to move into an exploration of the more obvious behavior control practices. These could be related to selection of traditional sex related toys, designation of play areas, expected patterns of play, and so on.

Following an exploration of sex-role bias in relation to child development on an objective basis, students tend to be less defensive and more open to examining and reassessing the ideas on a personal level. A word of caution in terms of planning is that longer assimilation time for learning appears to be needed when dealing with personal values.

By this time we seem to have come a long way from our Title IX starting point. However, the whole idea behind Title IX is to insure a climate and opportunity for all individuals to grow to their fullest according to their interests and abilities rather than restricting them to only those opportunities deemed appropriate for their sex. Individual behavior, expectations, and aspirations associated with being male or female have too long been purported as being ability-appropriate behavior, expectations and aspirations.[8] Such assumptions are not only false, but illegal when they lead to discriminatory practices. And, that's what all the fuss is about.

SUGGESTIONS FOR PLANNING AND PROMOTING CO-ED CLASSES

1. Review audio-visual materials for sex-role stereotyping.
2. Evaluate physical surroundings of the classroom for appeal to both male and female students.
3. Evaluate materials used in teaching all areas especially child development and family living for the subtle messages implied.
4. Review your own thinking concerning male-female role perceptions; use care in terminology, examples, and learning activities.
5. Evaluate books, magazines, and supplementary materials in terms of the role models presented (female students tend to identify best with models of their own sex and male students identify only with models of their own sex.)[9]
6. Develop objectives and learning activities from an unbiased perspective to focus on shared needs and interests of male and female students.
7. Develop course descriptions and titles which will appeal to all students.
8. Work closely with administrators and guidance counselors in promoting co-ed classes.
9. Re-define the term "homemaker" to include both males and females OR focus on another term such as home manager.
10. Use the assistance of an advisory committee to inform the community of current trends in the home economics program.

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[8] John P. Schenck, "Sexism in Textbooks: A Guide to Detection," *American Vocational Journal,* 51 (7) (1976), 42-45.

[9] Patricia Brown, "Sexism in Education: A Review of the ERIC Data Base," *Journal of Teacher Education,* 26(4) (Winter, 1975), 356.

TITLE IX AND HOME ECONOMICS INSTRUCTION

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During the past year Title IX has received widespread publicity throughout the United States. This publicity has disproportionately focused on physical education and athletic programs to the extent that people could believe the Title IX regulations deal only with these two matters. This is not the case. In fact the Title IX regulations describe those types of differential treatment based on sex which are prohibited in public schools. Title IX actually has relevance for nearly all aspects of public education, including the field of home economics.

WHAT IS TITLE IX?

The heart of Title IX of the Education Amendments of 1972 was simply stated in one sentence. "No person in the United States shall on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance,"[1] with certain minor exceptions. In an attempt to operationalize the meaning of this sentence the Office for Civil Rights in the Department of Health, Education and Welfare published proposed regulations in the Federal Register June 20, 1974. These proposed regulations generated an unusual amount of publicity. After reading over 10,000 comments responding to the proposed regulations, final regulations were drafted, approved by President Ford and, when Congress did not make any changes in them, became effective July 21, 1975. These administrative regulations have the effect of law.

There are six subparts to the regulations with subparts D (focusing on educational programs and activities) and E (focusing on employment) the most significant. Although subpart E may have considerable impact on the personnel operations of the school district there is little that is especially applicable to home economics teachers. (The one possible exception to this is that no home economics position could be advertised exclusively for one sex unless certain locker room or toilet supervision were part of the job.) On the other hand some language in subpart D uniquely applies to home economics.

> Although the Title IX regulations do have the effect of law there is considerable uncertainty about how strictly the regional enforcement offices of the office for Civil Rights will interpret the law and extend its meaning to fact situations not precisely stated in the regulations. A recent example made national headlines this summer when the San Francisco Regional Office for Civil Rights made a decision, with the advisement of the national office, that separate mother-daughter and father-son banquets violated Title IX, even if both were offered during the year. Following a hasty call from President Ford, the Office for Civil Rights decided to take the matter under further advisement. The Senate has since added amendments to the Higher Education bill that would exempt Boys' State and Girls' State programs and father-son and mother-daughter events from Title IX enforcement.
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> As with any new law, one should expect some conflicting views regarding interpretations of the regulations, especially their application to fact situations not explicitly stated in the regulations. Until more precedents have been established, administrative enforcement agencies, commentators and courts will undoubtedly vary in their judgments about some relevant situations.

THE LETTER OF THE LAW

Can the school limit home economics to girls?

Section 86.34 is quite explicit that schools may not discriminate on the basis of sex for admission into home economics classes. "A recipient shall not provide any course or otherwise carry out any of its education program or activity separately on the basis of sex, or require or refuse participation therein by any of its students on such basis, including . . . home economics. . . ."

[1]Education Amendments of 1972, 42 U.S. Code, Section 1681.

Is a school in non-compliance if over 75 percent of the students in a home economics class are girls?

Title IX does not establish any quota figures for sexual balance within courses in order to be in compliance. What it does require is that if an imbalance exists, the school must check the reasons for the imbalance and be satisfied that no action by school employees is behind the imbalance. Section 86.36(c) reads "Where a recipient finds that a particular class contains a substantially disproportionate number of individuals of one sex, the recipient shall take such action as is necessary to assure itself that such disproportion is not the result of discrimination on the basis of sex in counseling or appraisal materials or by counselors." Consider the following hypotheticals and their acceptability under Title IX.

1. Eighty girls and twenty boys have registered for Home Economics I. The counselors have scheduled the girls into four classes and the boys into a separate class. The five classes have the same instructor, use the same material and receive the same instruction.

This is prohibited under Title IX because Section 86.34 would consider this as providing a course separately on the basis of sex. The sexual segregation of the students is determined by school authorities.

2. A school has a student course scheduling capability that allows students to schedule their own course load. With Home Economics I offered five periods of the day the following self-scheduling has occurred:

Period A	20 girls	0 boys
Period B	18 girls	2 boys
Period C	5 girls	15 boys
Period D	17 girls	3 boys
Period E	20 girls	0 boys

Even though the population is not evenly distributed by sex across all of the available periods this would, I think, be acceptable under Title IX so long as the distribution in no way resulted from formal or informal advice of counselors or teachers to the students. But if the students themselves elect their schedules in something other than an even distribution across the population this is not contrary to Title IX.

3. The same facts as in #2 above, except here the teacher informally communicates to students she would prefer to make period C a boys' class. The teacher believes that it is easier to teach boys when they are in a separate class because they come into the course with different skills and feel less self-conscious. The students like the teacher and agree they would prefer to be in sexually segregated home economics classes.

Title IX would prohibit this because of the role of the teacher in counseling students. This case may be troublesome because of the different result even though the student distribution has stayed the same. The critical factor is that the teacher has become involved in the course selection of students, and this selection process has been influenced by attitudes about differential abilities in home economics activities. It is this attitude about differential ability based on sex which Title IX is trying to control.

4. Home Economics II is offered only to students who have successfully completed Home Economics I.

Twenty-five students, twenty girls and five boys, have pre-registered for the course. None of the boys have taken Home Economics I while all of the girls have.

Title IX certainly does not prohibit use of a valid prerequisite even though the distribution in the advanced course is resultantly skewed unless the prerequisite acts to mask some form of sexual discrimination. For example, in the hypothetical if the Home Economics I class had been open to members of both sexes in the past and the content in Home Economics I was really fundamental and necessary to the content in Home Economics II the boys would not qualify for admission into Home Economics II. Yet if boys in the past had not been allowed to take Home Economics I or the material is not really necessary for understanding Home Economics II, the requirement becomes a facade for excluding boys from Home Economics II. Where a school has excluded boys from Home Economics I in the past but still wants to limit admission to Home Economics II because it builds upon skills learned in Home Economics I the school can base the prerequisites on particular skills. This way boys can qualify for Home Economics II if they possess certain specified home economics skills but did not take Home Economics I.

THE SPIRIT OF THE LAW

Whereas compliance with the letter of the law should be relatively simple in Home Economics it is not so certain that it will be easy to comply with the spirit of Title IX. Although some may disagree I believe the spirit of Title IX is to eliminate sexual stereotyping in public schools so that students may prepare for any vocation or avocation without limits placed by the educational institution. It seems that there are two particularly fruitful areas for teachers of home economics to consider in determining whether they are acting in the spirit of Title IX.

Textbooks

Although Title IX specifically excludes textbooks from its coverage (see Section 86.42), there is research that indicates textbooks and curricular materials do stereotype the roles of the sexes,[2] and that the home economics area is particularly ripe for portrayal as the activity of girls. It will be useful for the home economics teacher to examine the course materials and determine the extent to which examples support sexual stereotypes.

A Non-sexist Home Economics

Beyond evaluating curricular materials the teacher of home economics can play a very important role in getting both sexes to view themselves outside of the sexist roles. This means encouraging boys to engage in activities of the home as important, and often scientific, managerial, artistic, tasks. Girls also have much to gain from a broad view of homemaking which includes participation of men in domestic activities as well as women engaging in business and public matters, whether it be professionally or privately. This breaking down of sexual stereotypes need not ridicule nor deemphasize the importance and significance of the homemaker, as quite often happens in the women's liberation movement, but rather can emphasize the skills involved in being a homemaker. These skills are important to anyone, regardless of sex, who eats, wears clothes, lives in some kind of housing, manages money and other resources or is a family member with or without parental responsibilities.

> Title IX required every school district to complete a self-evaluation within the first year and determine the extent to which it was in compliance. Every district was also required to appoint and advertise the appointment of a district Title IX designee to hear any complaints. If you are curious about your district's Title IX self-evaluation or would like more information about Title IX, contact your designated Title IX coordinator.

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[2]Lenore Weitzman and Diane Rizzo, "Sex Bias in Textbooks," *Today's Education* (January-February 1975), 49.

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A *New York Times* story on February 23, 1975, had a headline "More Wives Than Husbands Now Flee." Two years earlier missing men had outnumbered women two to one. The typical runaway wife was described as 34 years old, married at 19, first child within a year and a second about 18 months later, with little or no work experience.

What does this suggest in regard to curriculum content this wife needed a year—or two or three—prior to her marriage and in regard to needs for adult education?

* *

The Vocational Home Economics Teacher's Role in Eliminating Sexism in the School

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The current interest in the issue of sex discrimination in education may be due to the increased awareness of the negative aspects of sexism which place limitations on a student's development. The passage of Title IX of the Education Amendments of 1972 is an attempt to equalize educational opportunity for all students. This law states that "no persons in the United States shall, on the basis of sex, be excluded from participating in, be denied the benefits of or subjected to discrimination under any education program or activity receiving Federal financial assistance. . . ."[1]

Home Economics classes, among others, have been criticized for perpetuating sexual stereotypes.[2] Enrollment statistics indicate that vocational education programs follow traditional sex role patterns. A high percentage of young women are enrolled in home economics, business and health occupations. An equally high percentage of young men are enrolled in agriculture, industrial arts, and technical trades.[3] This pattern is viewed by many to be restrictive in light of individual differences and changing male and female roles.[4]

It is very likely that Title IX will have an impact on home economics programs and policies since home economics classes tend to be male or female intensive. The Title IX regulations require that courses which are eighty percent male or female be identified. Once these courses are identified, steps must be taken which assure that the disproportion by sex is not due to discriminatory counseling practices or teaching and counseling materials.[5]

Opening up options to all students is now required by law. This external force for change, Title IX, requires all schools to examine their policies, practices and curriculum for sex discrimination and to make the necessary changes. Eliminating sexist practices and making students aware of all career possibilities increases the likelihood that more females will be entering traditionally male occupations while more males are likely to enter traditionally female occupations. Those teachers likely to experience the greatest change in sex composition of their classes are home economics, other vocational, and physical education teachers.

In addition to the Title IX legislation, vocational education has another external force—the 1976 Education Amendments to the Vocational Act of 1963. These amendments place heavy emphasis on the need to reduce sex discrimination in vocational education. One of the stated purposes of state vocational programs is to "overcome sex discrimination and sex stereotyping in programs . . . thereby furnishing equal education opportunities for both sexes."[6]

The eventual elimination of sexist practices within schools is necessary in order to provide each student with a "wider range of alternatives in his [or her] life choices with each increment of education."[7] Students at all levels of education need to be "aided to find new doors rather than being trained even more narrowly to fit into a specific societal niche."[8]

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[1]Public Law 92-318, Title IX—Prohibition of Sex Discrimination, 92nd Congress, S.659, June 23, 1972.

[2]U.S., Congress, House, Committee on Education and Labor, *Sex Discrimination and Sex Stereotyping in Vocational Education, Hearings,* before the Subcommittee on Elementary, Secondary, and Vocational Education, House of Representatives, 94th Cong., March 17, April 21, 28, 1975. (Printed for use of the Committee on Education and Labor, Carl D. Perkins, Chairman, U.S. Government Printing Office, Washington, D.C., 1975.)

[3]U.S., Department of Health, Education and Welfare, Office of Education, *Vocational and Technical Education,* Selected Tables, 1972 (Washington, D.C.: Government Printing Office, 1972).

[4]JoAnn Steiger, "Vocational Preparation for Women: A Critical Analysis (paper prepared for Illinois Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education, under contract No. Rdd A5-240, 1974), chapter 2.

[5]Martha Matthews and Shirley McCune, *Complying with Title IX: Implementing Institutional Self Evaluation* (Washington, D.C.: U.S. Office of Education, n.d.), p. 34.

[6]National Advisory Council on Vocational Education, *Education Amendments of 1976 Title II—Vocational Education Outline Summary* (Washington, D.C.: 1976), p. 1.

[7]Ralph Tyler, "National Assessment: A History and Sociology," *School and Society,* 98 (December 1970), 472.

[8]*Ibid.*, p. 474.

Frazier and Sadker suggest that some options are closed to students; however, they believe that these options can be opened to all students.[9]

Many home economics teachers are aware of the problems associated with sex discrimination and sex stereotyping in schools. They realize the importance of providing all students with equal opportunities to develop their full potential. In order to achieve this goal, sexism in teaching materials and school policies must be recognized and eliminated. Home economics teachers can work to change sexist materials and policies in their schools.

Where do home economics teachers begin? We can begin by examining our own classrooms and departments for sexist materials and practices. However, the effect of such changes will be reduced if our students continue to experience sex discrimination in other classroom and school activities. Therefore, it is important to begin to change the sexist policies of the school.

Effecting change in schools requires an understanding of the change process and recognition of the importance of involving others in developing systematic plans for change. The principles for planned change can apply to the introduction and adoption of any new practices, ideas, or products.[10,11] These principles would be helpful to individuals who want to introduce any kind of educational innovation, e.g., a new home economics course, a plan for career education, or computer assisted instruction.

Some of the assumptions on which to base a plan for change in sex discrimination are: (1) the stages individuals go through as they move toward adopting or rejecting an innovation are identifiable; (2) some change techniques are more effective than others depending on the situation; (3) certain roles hinder while others facilitate change; and (4) developing and using a plan of action based on accepted principles is more likely to effect change than unorganized actions.

The stages individuals go through as they move toward adopting or rejecting an innovation are the knowledge stage, investigative stage, decision stage, and confirmation stage.[12] This process starts with the knowledge function, which begins when individuals become aware of a new idea or practice and gain some understanding about it.[13] For example, a home economics teacher, Ms. Martin, may read about the mini-curriculum unit "Expanding Career Options for Young Women."[14] She is concerned that high school students, particularly young women, have unrealistic ideas about their role in the work force.

During stage two Ms. Martin forms a favorable or unfavorable attitude toward the "Expanding Career Options for Young Women" curriculum. She carefully reviews the materials and talks with some teachers who have used the curriculum materials. These teachers talk about the enthusiastic response of their students to the materials.

The third stage is the decision phase. Ms. Martin moves into this stage when she decides to use the curriculum materials in one of her classes. During the confirmation stage, Ms. Martin looks for and collects evaluative feedback from her students. During this stage she looks for reinforcement for her decision to introduce this mini-curriculum to the class. If students respond positively to the unit, and other teachers, administrators, or parents are supportive of her efforts, she is likely to introduce the unit in her other classes and investigate how the unit could be incorporated into the curriculum so that more students could benefit.

Of course, combating sexism involves more than introducing materials to expand the career options of young women. The teacher will need to identify his/her goals for overcoming sexism in the school's curriculum.

One could begin by having all teachers examine their text and reference materials and curriculum for sex bias? Or teachers and counselors could examine the enrollment patterns of male- and female-intensive courses? Or administrators, faculty, and students could begin to use non-sexist language. Or a particular group of printed materials could be adopted because they show men and women in a variety of roles. Or all teachers could change some sexist

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[9]Nancy Frazier and Myrna Sadker, *Sexism in School and Society* (New York: Harper & Row, 1973), p. 179.

[10]Ronald G. Havelock, *A Guide to Innovation in Education* (Ann Arbor, Mich.: University of Michigan, 1971), Part II.

[11]Everett Rogers and F. Floyd Shoemaker, *Communication of Innovations: A Cross-Cultural Approach* (New York: The Free Press, 1971), Chapter 3.

[12]*Ibid.*, p. 99.

[13]*Ibid.*, chapter 3.

[14]JoAnn Steiger and Arlene Fink, "Expanding Career Options" (Field Test Curriculum prepared for Illinois Board of Vocational Education and Rehabilitation, Division of Adult, Vocational and Technical Education, Illinois Office of Education, Springfield, Illinois, 1975).

practices in their classrooms. After goals have been decided, then one could identify how key individuals in the school feel about the proposals for change. The importance of involving others is stressed by Frazier and Sadker who suggest that "when individuals are working together for a common purpose, not only can they encourage and support one another, but obviously they are more likely to see their cause recognized."[15]

Certain types of individuals are crucial to the change process. Identifying these individuals and involving them in one's plans for change increase the likelihood of the adoption and implementation of the proposed change.[16] The "opinion leaders" are key individuals. They are highly respected and influential members within the school. They are usually not the first to adopt innovations, but instead they wait to see how the idea works. Whether plans for change are adopted depends to a great extent on these "leaders" since their reactions influence many other teachers. Through informal observation in the teacher's lounge, cafeteria, and meetings, one can probably identify some of the "leaders" in the school.

Other leaders whose support is needed are the legitimators, facilitators, and gatekeepers who are in administrative positions. Their approval is required in order for changes to be initiated. The legitimators give the "okay" to try something out. The facilitators show approval of the innovation by such actions as providing funds and released time. The gatekeepers approve or reject requisitions for resources, outside consultants, and in-service activities. Securing the cooperation of these individuals is essential for the success of one's suggested changes.

Are there already some teachers who are concerned about sexism in the school and have initiated some changes in certain classes or departments? If so, these advocates from within can be critical to the adoption of one's plans for change.

A wide variety of techniques for bringing about change can be effective, depending on the stage of the adoption process. The techniques one selects may utilize printed materials, people, or products. Initially, to increase awareness of the problem of sexism, one might rely on printed and visual material. Articles related to sexism could be posted on the faculty bulletin board. Special journal issues focusing on sex bias in schools could be circulated to teachers.[17] A special "sex bias" section containing magazines, books, clippings, and other resource materials could be set up in the school library.[18] Brochures describing non-sexist books and materials could be shared with teachers.[19]

Speakers or movies emphasizing the changing roles of men and women could provide a basis for discussion at advisory council meetings or teacher in-service meetings.

One could also identify schools in the area that have adopted some of the changes one is proposing. If a nearby school has expanded the occupational opportunities for young women and men through the revision of the home economics, business, agriculture, health occupations, and industrial courses, an involved individual could be invited to talk with the faculty. Teachers in one's own school who are trying to eliminate sexist practices in their classes could be asked to relate their experiences to other teachers.

Arrangements could be made for leaders and potential adopters to visit other schools and observe the changes being put into practice.[20] They could be invited into one's own classroom or other classes where new materials are being used or a curriculum has been revised.

Once curriculum revisions are made or new policies adopted, the change agent's work is not finished. Implementation and evaluation strategies need to be planned and put into practice so that the changes result in improvement. Groups of teachers and students can work together to evaluate results of the change, identifying problems and suggesting modifications which might be needed.

As one develops a plan for change, s/he will want to (1) keep in mind the principles of planned change; (2) know and understand the changes mandated by Title IX; (3) identify a variety of individuals within and outside the schools who can assist; (4) determine who controls the funds which could be used to send leaders to conventions, provide in-service programs, or buy materials; and (5) identify teachers, students, and parents who will be supportive and talk with others about the need for change.

A home economics teacher can be an effective force for change if s/he plans carefully and involves other people. The result will be an educational environment which provides equal opportunity for all students to develop their potential more fully.

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[15]Frazier and Sadker, *Sexism in School and Society*, p. 192.

[16]Havelock, *A Guide to Innovation*, p. 132.

[17]*Educational Leadership*, 31 (2) (November 1973); *Phi Delta Kappan*, LV(2) (October 1973); *Illinois Career Education Journal*, 32(4) (Summer/Autumn, 1975); *Childhood Education*, 52 (4) (February 1976).

[18]Marjorie Stern, ed., *Changing Sexist Practices in the Classroom* (Washington, D.C.: American Federation of Teachers, n.d.), Item #600; The Resource Center on Sex Roles in Education, *Today's Changing Roles: An Approach to Non-Sexist Teaching* (Washington, D.C.: National Education Association, 1976); Diane Gersoni-Stavn, ed., *Sexism and Youth* (New York: R. R. Bowker Co., 1974); The Resource Center on Sex Roles in Education, *What Can You Do About Biased Textbooks?* (Washington, D.C.: National Education Association, 1976).

[19]The Resource Center on Sex Roles in Education, "A Resource List for Non-sexist Education" (Washington, D.C.: National Education Association, 1976).

[20]*New Pioneers Project* (Raleigh, North Carolina: Department of Public Instruction).

SEX-ROLE STEREOTYPING AND WORK: Opportunities for the Home Economics Teacher

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The author is indebted to Dr. Virginia Thomas, Associate Professor of Home Economics Education at Iowa State University for her guidance in the preparation of this manuscript.

Home economics teachers have a unique opportunity and responsibility to help young people develop decision-making skills regarding career choices. Because the profession has traditionally been largely female with an orientation toward homemaking, we can be informed advocates for increasing the range of choices of roles performed by men and women.

Traditionally there has been a definite division of labor based on sex. Social and technological changes have occurred gradually over time, and recently many men and women have begun questioning the appropriate roles of each sex. Whenever such a long standing social code begins to change, problems occur.

WHAT ARE THE PROBLEMS?

Two problems of career education that home economics teachers must address are: (1) that career choices of men and women are limited by sex role stereotypes, and (2) that occupations related to home economics and other traditionally female occupations tend to be low-pay, dead-end jobs.

The major role for men in our culture has been that of bread-winner. Males perceive a wider range of possible occupations than do females, and in fact, have three times as many job training options available to them within vocational education.[1] But not many men are choosing traditionally female occupations. If we are to maximize the potential of individuals and the nation's work force, males must be free to select, without social sanction, nurturing, creative, and even low-skill occupations.

The effects of sex role stereotypes and career choice seem to take a heavier toll on women because few high paying, high status jobs are socially approved for them. Ideally, career education is a life long process. But, the exploration and initial choices about careers occur during adolescence. This crucial period of career development for both men and women coincides with the period of intense interest in heterosexual relationships. Females perceive their primary roles to be wife and mother, and many teen-age girls value those roles to the extent that they avoid behaviors such as commitment to career, especially those that are traditionally male, which they believe might lessen their potential as desirable spouses. This myth of a dichotomous choice for women between a satisfying career and marriage must be exploded if we are to maximize the potential of women as well as the nation's work force.

Another impediment to successful career planning among young women is the assumption that "work" is an interim activity between school and motherhood. Even if a teen-age girl marries, she can expect to be employed for twenty years. One family in ten is now headed by a woman. Forty-four percent of all females sixteen years of age and older are employed in the work force today.[2] The fact of the matter is that most women work outside the home,

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[1]John F. Jennings, "Emerging Issues in Vocational Education," *American Vocational Journal,* 50(60) (1975), 29-32.

[2]Richard J. Shiffer, "Demographic and Social Factors in Women's Work Lives," in *Emerging Women: Career Analysis and Outlooks* ed. by Samuel H. Osipow (Columbus: Charles E. Merrill Publishing Company, 1975), pp. 10-22.

whether by choice or necessity, but not as an "interim activity" between any two events.

As is always true with social change, there is a cultural lag between passage of legislation, with attendant emerging philosophy, and its implementation. Although federal and state governments, public institutions, and private business and industry are attempting to eliminate it, sex discrimination continues. One aspect that is especially critical to career choice in blue collar jobs is the apprenticeship system. The apprenticed trades are generally well-paying, but closed to women. Few traditionally female occupations prepare their members by means of an apprenticeship which pays the individual as s/he learns, increasing the salary as skills develop.

In some schools the administrators, counselors and teachers reinforce sex role myths through curriculum, educational materials, staffing practices and their behavior.

At your school:

is the same emphasis put on career education for boys and girls?
is the same emphasis put on vocational education for boys and girls?
is the same emphasis put on college preparation for boys and girls?
is the same emphasis put on preparation for family living for boys and girls?

In few instances is there blatant, intentional sex discrimination. Rather, individuals truly believe they are acting in the best interest of boys and girls when they unconsciously reinforce traditional sex roles. Because of changing societal attitudes about roles, it is imperative that implicit and explicit sex role discrimination be eradicated from public education.

The second problem area is that occupations related to home economics and other traditionally female occupations are low paying and have little potential for promotion. Comparing all wages, women, on an average, receive 60 percent of what men do. In 1973, "in the apparel industry, 81 percent of the employees were women and the average weekly salary was only \$93."[3] This is in sharp contrast "with those in male intensive occupations. In transportation equipment, for instance, where 90 percent of the employees are male, average weekly earnings were \$210."[4] It is clear that the services and goods produced in the traditionally female occupations are necessary to fill consumer demand and keep our gross national product high. But, is it necessary or logical for a disproportionate number of females to receive low pay to perform these jobs?

Related to the dilemma of low pay is the fact that few supervisory/managerial positions are attached to the traditionally female occupations and those which are tend to be filled by males. It seems that we educate women for low skill jobs that have few opportunities for increased competency and responsibility. Do our career clusters have adequate ladders? Are we providing the necessary training in our occupational programs for women to ascend the career ladders?

ARE THERE SOLUTIONS?

Yes, there are solutions. Here are some short-term ones we are presently implementing or can implement:

1. Refuse to teach sex segregated classes and emphasize dual roles for each student. Title IX of the Education Amendments of 1972 makes non-coed classes illegal. Both males and females need education for homemaking, employment, and management of multiple roles. "Separate but equal" will not achieve maximum choice for either sex. Instruction should cater to individual student needs, but should not result in different standards or expectations of achievement on the basis of sex.

2. Help students clarify values relating to sex role stereotypes and work. We can help students analyze myths and truths about men and women's roles and encourage them to define what roles they want to assume; they must have the right to choose traditional or non-traditional roles. They need to examine the short-term and long-term ramifications of career choices, and explore which of their needs will likely be fulfilled through work. Females must be made aware that they will probably work for several years; they cannot rely on others to support them.

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[3]Jennings, p. 31.
[4]*Ibid.*, p. 31.

3. Advise students about the potential for low-pay, dead end jobs as well as benefits of occupations related to home economics. Students can make rational decisions concerning work only if sufficient, reliable information is available. It is important that we continue to offer effective job training through our high quality occupational home economics programs so the graduates are skilled. We must recruit both males and females for our occupational programs; preferential treatment is illegal and unethical.

4. Encourage teachers, counselors and administrators to vigorously recruit girls for courses that are not traditional female. No person in our junior and senior high schools has a more strategic role to play than the home economics teacher in effecting this change. We must urge males and females to prepare for jobs so they will have adequate incomes to provide the level of living which is essential for an acceptable quality of life for families.

Long-term solutions for the future could include these among others:

1. Continue to develop career ladders and lattices within home economics related occupations. We need to expand the network for upward mobility within our related occupations. The needed work experience or training must be available to persons who can and want to rise within a career cluster. An experimental child care apprenticeship has been developed in Wisconsin.[5] This approach and competency-based performances are two avenues by which upward mobility can be facilitated.

2. Fulfill our civic responsibility through promoting change in sex role stereotyping and attitudes about work. The low salaries of traditionally female jobs such as child care attendants and waitresses are not a home economics problem, but a societal problem. Nonetheless, home economists have a responsibility to facilitate change in attitudes about "women's work."

Legislation remains one of our most potent but little used channels for change. We need to increase our input and influence with state and federal legislators. For example, our views concerning ratification of the equal rights amendment should be made known, perhaps collectively and certainly individually.

The Department of Labor, among other governmental agencies, needs to hear our requests so that it can respond more vigorously to obvious discrimination. A case in point is the *Dictionary of Occupational Titles* which rather consistently classifies traditionally female occupations as low skill. (A dog trainer is considered to have a more complex job than a nursery school teacher in areas of "data" and "people."[6])

We can expand our relationships with business and industry. With affirmative action and governmental contracts requiring fair treatment of the sexes, home economists and persons in business and industry can cooperate to achieve mutual goals relating to employment practices.

It is desirable also to support aspects of the women's movement which speak to the employment needs of women at all socio-economic levels. Seemingly, the ideal of free choice for improved quality of life is embraced by both home economics and the women's movement.

Teaching Strategies

1. **Evaluation of suitability of jobs.** A home economics class studying career education or an occupational home economics class can develop criteria for evaluating the suitability of a job for the present and for ten years hence. The class might brainstorm, listing characteristics that affect the desirability of a job, then condense or revise the list into criteria. Each student could evaluate a job which s/he is considering, and then participate in a class discussion about the suitability of that job for him/her. The *Dictionary of Occupational Titles*, as well as other materials the guidance counselor may have, and resource persons in the community would be beneficial sources for students. The criteria the class develops might include the items shown in Figure 1.

2. **Panel: men and women in non-traditional occupations.** This strategy would be appropriate for either a homemaking class or an occupational home economics class. Men and women working in non-traditional occupations from the community can be invited to serve on the panel. Examples of persons who would create interest on the panel would be police-

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[5]Norma Briggs, *Women In Apprenticeship—Why Not?* (Washington, D.C.: United States Department of Labor, 1974), p. 22.

[6]*Ibid.*, pp. 18-20.

Job Title ______	Degree of suitability after high school					Degree of suitability ten years from now				
Criteria	1	2	3	4	5	1	2	3	4	5
salary and benefits										
working conditions										
personal reward										
contribution to others										
interest and challenge										
status										
possibility for advancement										

FIGURE 1

women, male nursery school teachers, female plumbers, female politicians, male nurses, female farm managers, male secretaries and many others.

The following questions might be the focus of the discussion and could be given to the participants in advance:

- How did you decide you wanted to do the kind of work you are presently doing?
- What satisfaction/challenges does your job give you that you might not have in a more traditional job?
- What difficulties have you experienced on the job? Are any of them related to sex?
- What difficulties have you experienced with your family or friends?
- Would you change your job choice if you could start over? If so, how and why?

3. **Roles on a time line.** A time line approach can help students visualize the over-lap of roles during their life span. To utilize a form like the one below, students need to understand the word "role," and girls must be aware of labor statistics such as those mentioned earlier in this article. Encourage students to speculate on time spans even though they may not be accurate. During class discussion which follows, there is an opportunity to help girls evaluate the realism of their expectations about the duration of their work role. This is how the strategy might work:

Time line for roles. People fulfill different roles at different times in their lives. Below on the left are two roles and space for you to add others. After you have listed other roles you believe you may perform during your life, shade in the time lines at the ages you anticipate doing them. There may be interruptions in some roles, others you may perform continuously for the rest of your life. We will discuss your time lines and the questions below when you finish.

	Years of Age													
Roles	0	5	10	15	20	25	30	35	40	45	50	55	60	?
Worker														
Son/Daughter														
______														
______														

- Which role on your time line spans the longest time?
- At what ages does your time line indicate you will function in the most roles?
- What difficulties are apt to occur when you are performing so many roles at once?
- Which role was most difficult to estimate time span for? Why?

FIGURE 2

It is clear that the future necessitates change in sex role attitudes for all of us. As home economists we have a responsibility to help individuals adapt to these changes and make rational choices. We must be on the forefront of the movement to eradicate sex role stereotyping from career education.

COEDUCATIONAL CLASSES STRESS LIFETIME SKILLS

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Under close scrutiny today are course offerings, programs for pregnant students, extra-curricular activities, counseling and athletic programs, discipline and employment practices to determine the degree of Title IX compliance in the nation's schools. Progress has been made in removing many barriers that restrict enrollment by sex. However, in some schools very little is done to encourage enrollment of the opposite sex in traditionally stereotyped programs. Sex stereotyping has become recognized as a societal problem and must be dealt with in all segments of society.

> During the fiscal year of 1975, 912,236 students at the secondary, postsecondary and adult levels pursued vocational education study. In the traditionally female oriented homemaking programs, over 15 per cent were males. Over 16 per cent of the occupational home economics enrollment were males.[1]

Students in home economics were thought of as females when the Smith Hughes Act was passed in 1917. Current legislation recognizes the students as male and female and outlines specific aspects for consumer and home economics education programs as

> . . .consisting of instructional programs, services, and activities at all educational levels for the occupations of homemaking including but not limited to, consumer education, food and nutrition, family living and parenthood education, child development and guidance, housing and home management (including resource management) and clothing and textiles. . . .[2]

Such programs are required to

> . . . encourage participation of both males and females to prepare for combining the roles of home-makers and wage earners; encourage elimination of sex stereotyping . . . by promoting development of curriculum materials which prepare males and females who have entered or are preparing to enter the work of the home. . . .[3]

Boys and girls in home economics classes which have varied titles and course descriptions are not considered out of the ordinary in the last quarter of the twentieth century.

As the full portent of Title IX is realized, educators will begin a broader consideration of curriculum development and/or curriculum revision to meet the intent of legislation. Home economics teacher awareness and involvement in curriculum development to include both male and female emphases will surely strengthen the quality of life for all individuals and groups of people.

In an effort to comply with legislation regarding sex roles and discrimination, educators must be aware that the self-concept of both male and female must be enhanced and preserved. According to Bradley[4]

> Teachers wait 2.2 seconds for a response to a question from a boy, but they give a girl 7.7 seconds to respond. Female teachers call on girls ten times more often than on boys. Eight out of every ten children sent to the principal's office are boys. Four out of five poor readers are boys.

The author is indebted to vocational home economics teachers in Jefferson and Orange counties of Texas for sharing educational philosophies and practices found to be pertinent to successful coeducational classes in home economics.

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[1]Advisory Council for Technical-Vocational Education in Texas, *Vocational Education: Impact '76* (May 1976), p. 6.
[2]Congressional Record, House, September 27, 1976, H 11080, "Title II, Vocational Education."
[3]*Ibid.*
[4]R. C. Bradley, "Female Favoritism Alleged," *The Texas Outlook*, 60 (October 1976), 32.

INVOLVEMENT IN EDUCATION FOR LIFE SKILLS

In recent interviews with seven southeast Texas vocational home economics teachers of Family Living, Home Management, Child Development and Home Economics I classes, these questions were asked:

- How do you view the contribution that the home economics curriculum can make to young men and women in your classes?
- What types of learning experiences do male and female students relate to most positively?
- Of the concepts covered in the consumer and home economics education classes you teach, which concepts do students seem to find the most relevant?
- What adjustments, if any, do you make in choice of teaching techniques when boys are in your classes?

Without exception each of the teachers responded positively and affirmatively regarding their experiences with coeducational classes in home economics related courses. A summary of the responses is as follows:

- Curriculum for coed classes should contain concepts that are equally as relevant and practical to males as to females.
- Often the value and rewards gained from the mixed classes are noted later as a result of involvement in everyday living.
- With changing roles and changing values, it is important for the two sexes to share the learning process. Class discussions become especially important.
- Concepts that relate to possible careers and identify answers to everyday problems need to be stressed.
- Adolescent males are participating family members and most of them will establish families of their own; therefore, males need to be prepared for this role.
- Coed classes have a definite advantage in the area of family relationships in that both sexes become aware of attitudes and values the opposite sex has.
- Learning experiences need to be worthwhile. Teachers should question whether the time required for particular experiences is effective enough in terms of results to merit its use.
- Specialized courses have particular relevance for males and females. Courses such as child development, home management, home and family living, and consumer economics should be offered with emphasis given to foods and nutrition, clothing and textiles and housing as related to management of resources.
- There should be a high level of cognitive involvement. Depth of thinking and consideration of problems are expected, and learning experiences that are provided should give opportunity for studied responses.
- Value perspectives are different for coeducational classes. Discussions and activities are more relevant to attitudes and opinions of both sexes.
- Teaching techniques are chosen to meet needs of students in the classes each semester or year.
- Concepts taught in family living classes are as relevant for males as they are for females.

Teaching Techniques

In general, techniques for coed classes should be varied and provide contact with simulated or real experiences when possible. Role playing, discussions which are based on a certain degree of research, individualized learning packets, games, films, filmstrips, observations, demonstrations, field trips, recordings, and committee work provide experiences which contribute to the learner's understanding.

Males enrolled in coeducational home economics classes feel positive about their study of lifeskill concepts. On a day when children from infancy through four years of age were brought to a class for a play session in one school, students used checklists to note observations of behavior, growth and development. When one was asked what he thought was the most important thing he had learned in class, he replied, "Learning about child abuse—how it happens, who is involved and why so many fathers are guilty of it—has helped me to know what I want to be as a father some day." The high incidence of child abuse cases seems to add credence to the idea that concepts dealing with parenting need to be emphasized in curriculum for young people—male and female.

SOCIETAL CHANGES AND CURRICULUM DEVELOPMENT

Curriculum will vary from program to program as expressed needs and values become evident to the home economics teacher. Factors which may influence variations in home economics programs may be prevailing attitudes of parents, school administrators and adolescent peers, regarding sex roles and appropriate behavior for males and females. A

study reported by Urber and Labouvie supports the idea that age, in addition to and perhaps more significantly than sex, is a major dimension in conceptualizing the sex role.[5]

Classroom educators need to provide opportunities for student expression regarding role stereotyping. Students need assistance in working for individual identity as a means of discovering unique sex and role identity with no undue emphasis given to either sex.[6] Coeducational home economics classes provide an opportunity for individuals to "learn who they are and what they are from the interaction with those who surround them throughout life."[7]

SUMMARY

Home Economics Education is preparation for life, and coeducational classes in family living should be continuous throughout life. As the thinking of home economists is clarified on the issues of sex roles, these educators can lead in creating viable classes that will help males and females grow throughout their lives.

Bernice M. Moore[8] has stressed that communication is vital to living in a world that is changing each day with tremendous, accelerative speed. The interaction among men and women of each generation may very well be a factor in future family patterns.

> Families will always exist. . . . Children will be brought into the world and reared by their elders. Fundamental values of this culture will hold steady. They always have. Many ideas will change as well as ways of behaving. Even more radical differences will develop in ways of doing things. Scientific, technological, urban living—with all of its dislocation, movement and change—will continue.
>
> To meet the inevitability of change, generations will always create new ways of interacting among themselves. The imperative is to keep the channels of communication clear.

Our challenge is to provide an educational environment for boys and girls, the future men and women, that will encourage them not to be content to accept what exists but rather to create a better existence.[9]

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[5]K. A. Urbert and Vief Labouvie, "Conceptualization of Sex Roles: A Life Span Developmental Study," *Developmental Psychology*, 12 (1976), 15-23.

[6]Shirley Rose, "Can't Boys Just Do Boy Things?" *The Texas Outlook*, 60 (October 1976), 31.

[7]Eleanore L. Kohlmann, *Home Economics for Young Men: A Teaching Guide* (Ames, Iowa: The Iowa State University Press, 1975), p. 29.

[8]Bernice M. Moore, "Interaction Among Generations: A Factor in Future Family Patterns," *Journal of Home Economics*, 59 (1967), 628.

[9]Marjorie East, "Family Life by the Year 2000," *Journal of Home Economics*, 62 (1970), 18.

In 1975, 47 percent of U.S. mothers with children under 18 were in the labor force, 55 percent of those with children 6 to 17, and 39 percent of those with children under 6 years of age. Four out of ten of these employed women worked full time for the whole year. (From Women Workers Today, U.S. Department of Labor, Employment Standards Administration, Women's Bureau, 1976, pp. 4, 6.)

CHANGING SOCIETAL ROLES AND TEACHING

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The title excerpted here is a 1976 publication of the Home Economics Education Association, 1201 16th Street, N.W., Washington, D.C. 20036. 44 pp. \$2.50. Abstracted by the editor.

"Barb Rogers' husband has just left her. She is having difficulty finding someone to take care of her three small children while she works at her new job at the shoe factory. Then she receives a letter from the finance company demanding that she continue the car payments as her husband's address is unknown and she co-signed the note. 'But he even took the car,' Barb exclaims. . . ."

This is one of eleven case situations with which this publication is introduced. All of them are designed to portray problems of the present and projected future in relation to changing roles, especially sex roles.

The focus of the entire bulletin is on helping teachers to help their students in recognizing life style options, sex stereotypes, career opportunities, socialization tendencies, legal rights, and flexibility in roles.

The narrative is interspersed with cartoons, quotations, drawings, and forty-seven teaching activities of which the following are illustrative (from pages 16, 17, 19, 20, 21, and 33):

1. Give each student a situation to react to in writing and follow with class discussion. For example: Your friend Ted has just told you he wants to be a nurse. His friends are teasing him and calling him a sissy. Tell (the class or in writing) what you would say to Ted and to his friends and explain probable reasons why Ted and his friends feel as they do. Explain how these feelings may affect what Ted does (or substitute your friend Sue as a truck driver, or a West Point cadet).
   SCORING: If a student mentions any effect of stereotyping (the teasing, Ted's embarrassment, the labeling of "manly" jobs or lack of understanding), part of the teaching objective has been reached and points can be given. Additional points affect Ted's actions both now and in the future. If a student agrees with Ted's friends but recognizes the sources and effects of stereotypical attitudes, s/he has met the objective, even if the teacher's view is different.
2. You might prepare a bulletin board with the title "What Roles Do You Play?" across the top and "What Roles Will You Play in the Future?" across the bottom. Ask students to bring pictures of people performing various roles: homemaker, wage earner, family member, etc., and place them on the board. Use this as a discussion base to help develop the generalization that a person plays many roles at any one time in life and these roles are constantly changing.
   The bulletin board could also provide a springboard for consideration of various options open to individuals in today's society.
3. Have students list all the things done by a father and a mother in a day (or a month). Then combine, to see what a single parent has to do. Discuss which ones could be eliminated, or shared with children or hired help. Identify additional roles a single parent has—possibly like establishing friendly relationships with the opposite sex.
4. Provide newspapers for students and instruct them to choose from the classified advertisements a job for which they would like to apply. Ask them to choose any job that appeals to them whether or not they are qualified to hold the position. When each student has selected a job, discuss the choices. Did female students choose "female" jobs while males chose "male" occupations? Are there still subtly sex-segregated want ads in the papers? Which jobs, traditionally "male" or "female," offered higher salaries?
5. Have female students pretend they are male and plan their futures. Have male students plan their futures pretending they are female. Have female students pretend that marriage is not an alternative and plan their futures. These simple planning exercises will

probably vividly illustrate how easy it is for both males and females to plan stereotyped roles for their futures.

6. Interview three different people who have worked at least eight to ten years about how many different kinds of jobs they have held and the type of training they needed to be prepared at different times in their working life.
7. Perhaps the most useful service we could perform would be to provide information, counseling, and support for those, especially women, who need education or re-education to meet changed life circumstances. Such information and counseling particularly needs to be provided to students while they still have ample time to develop attitudes and skills for employability. Encouraging them actually to practice such skills, to keep up with developments in their occupational field, and to grow personally, can also be very valuable. Parents also need such information. The more options one develops through education (major, minors) and work experience, the more likely one is to be able to adapt to circumstances. Students may be uncertain as to occupational/career goals. However, the more specific information that they can see and utilize, the more people with whom they can talk, and the more work experiences they can explore, the better equipped they will be when their circumstances demand decision and action.
8. Variations in state and local statutes sometimes are more stringent than federal law. The following questions refer to federal law.

   Check (√) YES if you think the statement describes a situation that is true under present law; otherwise check NO.

YES	NO	
1.		Businesses and credit card companies may set a minimum earnings level as a standard in granting credit.
2.		If you are refused credit, you must be given an explanation if you request it.
3.		When a couple applies for a mortgage, the income of both spouses must be considered by the lending institution.
4.		Even though she appears to be a good credit risk, a woman may be denied a mortgage or other credit if the lender believes that she might get married and lose her income.
5.		Phil Brown, an engineer, was left with two young children when his wife died. She had been a professor at the state university (not covered by Social Security). He receives no Social Security benefits for himself or the children, although, had he died, his wife would have received such benefits.
6.		A man and a woman have the same job, except that he is to turn out the lights and lock up the plant. The company may pay him more because he has more responsibility.
7.		A husband and wife have several credit cards in his name, which either may sign. After a divorce, the companies may close the accounts and refuse credit to the former wife in her own name because she has no credit history.
8.		Two users of a credit card may have separate credit histories from the same account if they wish.
9.		New low income housing has just opened in town. Ms. Cole is not allowed to rent an apartment, but the apartment is rented the next day to Mr. Coleman. Both are within the specified income levels.
10.		When real estate (house, farmland, etc.) is held jointly, court probate costs may be reduced, but taxes are likely to be higher than if there were separate owners.
11.		Mrs. Jones earned considerably less as a secretary than her salesman husband earned. She will receive no Social Security retirement benefits from her own contributions because her benefits as a wife will be higher.
12.		If a couple co-sign a note, and the man walks out, the woman is legally responsible for paying the note, even if the man supported her and she has no income.

Answers: All except 4, 6, 7, and 9 are true under present law, but some legislation is so new that knowledge and enforcement lag behind. Points in the "Additional Information for Students" (pages 23-28) that clarify the situations above will be marked **

ASSERTIVENESS AND SELF-ESTEEM:

STANDING UP FOR OUR RIGHTS

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Billy, who is late leaving school, decides to stop and buy milk at the grocery store. While waiting in line at the check-out counter, a lady with a full cart of groceries pushes her way in front of Billy. Billy becomes angry but does nothing.

A month ago Ricky lent Pat $5. Since then Pat has had many personal problems at home. Ricky wants the money back and resents Pat for not offering to return it. Each time Ricky sees Pat, she talks vaguely about things that cost money, hoping that Pat will take the hint.

Have you ever found yourself in one of these situations or similar ones where you felt inhibited, hurt, defensive or humiliated? If you, in your multiple roles as a teacher, adult, and home economist, sometimes feel that others are taking advantage of you or that you have lost control of a situation, then most likely your students have also had similar feelings and experiences. These feelings can be the result of non-assertive behavior which is often encouraged by the subtle socializing, particularly of women, in our society. If you tend to encourage non-assertive behavior in your students by favoring such students, perhaps it is time to turn the tide and help them to become more assertive. Encouraging assertive behavior helps students develop self-esteem and become more expressive and self-enhancing.

Understanding the term assertive behavior is the first step towards promoting assertiveness in students. Many definitions of assertive behavior exist in the literature. The four presented below summarize these definitions.

Dr. Joseph Wolpe has defined assertiveness as "the proper expression of any emotion other than anxiety towards another person."[1] Dr. Arnold Lazarus suggests that assertive behavior is the "aspect of emotional freedom that concerns standing up for your rights. This involves (1) knowing your rights; (2) doing something about it; (3) doing this within the framework of striving for emotional freedom."[2] Dr. Herbert Fensterheim states that "assertion = self-esteem, since the more you stand up for yourself and act in a manner you respect, the higher will be your self-esteem."[3] Arthur J. Lange and Patricia Jakubowski define assertive behavior as "standing up for one's personal rights and communicating thoughts, feelings and beliefs in direct, honest, and appropriate ways which do not violate another person's rights."[4] Although the words are different, each definition implies that assertiveness involves knowing what your rights are as a person and standing up for these rights through the expression of appropriate emotions and actions.

Another way of conceptualizing assertiveness is to view it as a behavior on a continuum between non-assertive and aggressive behaviors. In the book *Your Perfect Right*, Robert

non-assertive —————— assertive —————— aggressive

Alberti and Michael Emmons discuss these three types of behaviors.[5] They describe the non-assertive person as one who typically is inhibited from expressing feelings and then often feels hurt or anxious as a result. The person who carries the desire for self-assertion to the extreme of aggression generally expresses feelings at the expense of others. Thus, while the

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[1]Joseph Wolpe as quoted in Herbert Fensterheim and Jean Baer, *Don't Say Yes When You Want to Say No* (New York: Dell, 1975), p. 24.

[2]Arnold Lazarus as quoted in Fensterheim and Baer, *op. cit.*, p. 25.

[3]*Ibid.*

[4]Arthur Lange and Patricia Jakubowski, *Responsible Assertive Behavior: Cognitive/Behavioral Procedures for Trainers* (Champaign, Ill.: Research Press, 1976), p. 7.

[5]Robert Alberti and Michael Emmons, *Your Perfect Right* (San Luis Obispo, Calif.: Impact, 1970), pp. 9-25.

aggressive person may achieve goals, the recipient of the aggression feels hurt, defensive or humiliated. In contrast, the assertive person is able to choose behavior patterns for a given circumstance and then honestly to express feelings that achieve the intended goal.

Rarely do we find students who are either non-assertive, assertive or aggressive in every situation. Most people are able to be assertive under some circumstances yet find themselves non-assertive or aggressive in others. As an aid to identifying those situations which require more assertive behavior, it is helpful to use Alberti and Emmons' categories of *levels of assertiveness.*

> (1) The first level is impersonal or on-the-street situations. This involves interactions with such persons as salesclerks, waiters or waitresses, receptionists or strangers on the street. (2) The second level involves interactions with casual relationships such as people one meets at a party, in class or at a meeting. (3) The third level involves direct relationships, including bosses, friends and teachers. (4) The fourth level is that of intimate relationships. Interactions with parents, children, close friends, spouses, and lovers would be classified at this level.

Generally people find it easier to be more assertive at impersonal levels, so it is wise to have students practice their assertiveness first at impersonal levels and gradually move to more intimate situations. This will help ensure success and positive feedback which is so important in all educational experiences.

Identifying assertiveness levels leads us to the question of how to teach students to become more assertive. The remainder of this article is devoted to suggested learning activities for the teaching of assertive behavior in the classroom. A short unit on assertiveness can be developed around the suggested activities. Suggestions are also provided for incorporating assertive behavior into specific subject oriented courses. (See box.)

TEACHING ACTIVITIES

- Introduce the concepts of non-assertive, assertive and aggressive behavior. The students might enjoy imitating or role-playing their perceptions of these behavior. Descriptions of each behavior can then be formed from the imitations.
- Have students keep a log of their assertiveness for one week. The purpose of the log is to help students become aware of how often and in what situations they are assertive. Therefore, the format of the log might be open-ended where the student would write down situations that indicate assertive behavior. For example:

Monday:	I asked the student next to me to be quiet.
	I said "hi" to someone I didn't know.
Tuesday:	I complimented a friend.

Or, the format might be in the form of a checklist, organized into the four levels of assertiveness so that the student could simply mark non-assertive, assertive or aggressive behaviors at each level. For example:

MONDAY	Non-assertive	Assertive	Aggressive
On-the-street			
Casual			
Direct			
Intimate			

After completion, the log can be used:

1. As a "pre-test" against which to measure behavior after the unit.

2. To stimulate discussion about such things as: How commonplace it is to be assertive; reactions of people to assertive behavior; and personal feelings during and after assertive behavior.

3. To determine types of situations in which students need to practice being assertive.

Another method of appraising personal assertiveness is to have students take an assertiveness inventory. One such inventory is available in *Your Perfect Right.*[6]

• Have the students practice being assertive through behavior rehearsal (role-playing). One successful method of behavior rehearsal is to assign one person in each group as a "coach." The responsibility of the coach is to listen to the behavior rehearsal and then provide feedback or suggestions as to how the other person could be more assertive. The participants should then repeat the behavior rehearsal situation, trying to use the suggestions. The process can be repeated until the "asserter" feels confident about the role being played.

As previously mentioned, it is a good idea to begin practicing assertive behavior at impersonal levels, gradually moving towards more intimate levels as students feel more confident. Examples of behavior rehearsal situations are provided below.

Impersonal—Sue, a high school student, often baby-sits and does odd jobs to earn money to buy clothes. Recently she purchased a pair of slacks with the fiber content listed as 100% polyester. Although she followed the washing instructions the first time she laundered them, the slacks shrank so much that she could not wear them. Sue decides to return to the store and ask for her money back.

Casual—Beth (or Tom) has seen a student in school whom s/he would very much like to meet. There is a football game this Friday night and s/he has decided to ask this student to the game. Beth (Tom) has the telephone number and for the last two nights has dialed the number and then hung up. S/he feels awkward because s/he doesn't know the student very well and is also afraid this person may already have a date. Tonight is the last night s/he can call and ask for a date.

Direct—Jill has a summer job at the Dairy Queen where she has worked for three summers. Last year the boss gave Jill a raise and indicated she would receive another raise if she returned this year. It is already the middle of July and nothing has happened. Jill decides she must talk to the boss.

Intimate—Tim's parents have given him permission to spend Saturday at school for a charity function and go out with his friends afterwards, *IF* he finishes his household chores before he goes. Tim works Friday after school and finishes his chores. Friday night his parents remember they need a baby sitter for Saturday evening and tell Tim he must return in time to stay with his younger brother. Tim thinks this is unfair and talks to his parents.

• As students begin to gain confidence at being assertive in behavior rehearsal situations, they should begin to transfer this behavior outside the classroom. To help them transfer this learning, specific assertive behavior assignments can be given such as those listed below. Their reactions, successes and failures could then be shared in a follow-up discussion.

Impersonal	Go into a store and ask for change for a dollar.
	Stop someone on the street and ask for directions.
Casual	Say "hi" to someone in class you've never spoken to before.
	Ask someone for a date.
Direct	Propose an idea to a teacher for a new class project.
	Compliment a friend.
Intimate	Ask a favor of a close friend.
	Talk to your parents about your responsibilities at home.

• If students are interested in seeing "concrete evidence of their improvement," they might enjoy keeping a second log of their assertiveness.

In order to promote continued assertive behavior in students, there are two responsibilities that teachers must assume. First, an atmosphere must be provided in the classroom which encourages assertive behavior. This means avoiding the common practice of encouraging or favoring the quiet non-assertive student. Instead, teachers must give positive reinforcement to assertive behavior displayed by students. Second, teachers may serve as models for students by practicing being assertive in situations where previously they have been non-assertive or aggressive. For example, students can view a teacher's assertive behavior in the classroom as the teacher deals with discipline problems, requires quality work or pays a compliment to a student. In the school setting, opportunities may arise with

[6] *Ibid.*, p. 117.

administrators or colleagues to promote a better understanding of home economics, possibly by offering to give a lecture on money management to a business class or speaking to a PTA meeting to inform parents about home economics and maybe even by refusing to serve refreshments or wash football uniforms! Becoming more assertive, and thus providing a good model, as well as encouraging and teaching assertive behavior to students can lead to the development of high self-esteem and ultimately happier and more satisfied individuals, family members, employees and consumers.

Suggested situations in which to practice assertive behavior within subject matter courses.

Subject	**Behavior Rehearsal Situations**
Family Living	Parent & Children—household responsibilities curfew hours favoritism
	Siblings—privacy borrowing
Consumer Education	Salesclerks—returning a product requesting information asking for service
	Door-to-door salesperson—refusing to buy asking to return later
	Bank personnel—opening a checking account requesting a loan
Clothing	Fabric salesperson—asking for fabric without flaw inspecting fabric before buying
	Salesperson—returning a poorly constructed garment
Foods	Grocery store personnel—returning a spoiled product complimenting them on beginning unit pricing
	Manufacturers—writing a letter complimenting or complaing about product or requesting nutritional information
Child Development	Child & child care worker or parent—setting limits showing affection
	Child care worker & parent—explaining objectives of preschool discussing child's behavior

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Factors in Career Orientation of College Females

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Are college females more career-oriented than they have been in the past? Responses of female college students to a College Student Questionnaire (CSQ) dealing with student's plans, backgrounds, and attitudes administered in 1965 and again in 1970 indicate that the percentage of female students who agree with traditional roles of women is decreasing (Epstein, 1972). Similarly, Helson (1972) found career oriented women more prevalent in the 1970's than the 1950's. Paralius' data also indicated a substantial shift from non-career to more strongly career-oriented women between 1969 and 1973 (Paralius, 1975).

A number of different factors have been associated with the development of career or non-career orientation of women. The factor most often cited is the employment status of the mother. Almquist (1970, 1971) found that career oriented college females more frequently have working mothers while non-career oriented students have mothers who are more involved with leisure activities. Furthermore, daughters of working mothers planned to combine a homemaking and working career more often than girls of non-working mothers (Banducci, 1967; Oliver, 1965; Tangri, 1972; and Vogel, 1970). Meier found that children of working mothers have more positive attitudes towards sexual equality than children of non-working mothers (Meier, 1972).

Other factors cited as positively associated with career orientation in college females include the number and variety of their work experiences (Almquist, 1970, 1971), and the educational level achieved (Almquist, 1970).

Tarver found that both city-size and distance from metropolitan centers affect the proportionate numbers of employed females; the percentage employed declines consistently with distance and increases consistently with city size (Tarver, 1970). This could affect career orientation of college females living in metropolitan versus rural areas.

Factors cited as negatively associated with career orientation include sorority membership, being married, engaged, or going steady (Almquist, 1970, 1971), and certain college majors (including home economics). Wagman, in a study of University of Illinois coeds in 1962, found the non-career oriented females to place emphasis on "practical, assistance to the male, and humanitarian aspects" of a job (Wagman, 1966, p. 799). In Almquist's study of college females, the major with the highest percentage of non-career oriented students was home economics (Almquist, 1971). In Angrist's analysis of changes in career orientation throughout the college years, the fectors (those beginning as freshmen with high career-orientation and graduating with a non-career orientation) were most likely home economics majors, probably from the teaching option (Angrist, 1972).

Factors studied that seem to have little or no association with career orientation include the educational level of either parent, the occupational level of the father, the grades obtained in school, and participation in extra-curricular activities other than sororities (Almquist, 1970, 1971).

This study involved determination of career orientation of college females and correlation of career orientation with the following factors: (1) college major, (2) age, (3) year in college, (4) marital status, (5) college grades, (6) sorority and cooperative house membership, (7) variety of job experience, (8) education and occupation of father and mother. For the purposes of this study Almquist's definition of career orientation was used: "includes long term committment to a career with the expectation that the career will be combined with marriage" (Almquist, 1971, p. 265).

PROCEDURES

Questionnaires were administered to 175 female students enrolled in five different foods and nutrition courses at the University of Illinois. The group consisted of 131 home economics majors, and 44 non-majors. The questionnaires included background information, general

attitude questions concerning male-female roles in education and careers (adapted from Meier, 1972), and three personal career aspiration questions (adapted from Almquist, 1971).

Students were classified as career or non-career oriented, based on their responses to the personal aspiration questions. The first question was as follows. Two or more responses of strongly agree or agree constituted a career oriented response to this question.

> Assume that you are trained for the occupation of your choice, that you will marry, and that your husband will earn enough so that you will never have to work unless you want to. Would you want to work under the following conditions?
> A. I would work if I had no children.
> B. I would work if I had one child of preschool age.
> C. I would work if I had one child of school age.
> D. I would work if I had two or more children of school age.

The second question continued. A response of either C or D was considered career oriented.

> Under these same conditions with at least one child, which of the following would you prefer? (Check one)
> A. to participate in clubs or volunteer work
> B. to spend time on hobbies, sports, or other activities
> C. to work part-time in your chosen occupation
> D. to work full-time in your chosen occupation
> E. to concentrate on home and family
> F. other—explain briefly

On the third question C, D, or E was considered a career oriented response. It asked:

> Which one would you most like to be fifteen years from now?
> A. a housewife with no children
> B. a housewife with one or more children
> C. an unmarried career woman
> D. a married career woman without children
> E. a married career woman with children

Subjects giving career oriented responses to two out of these three questions were classed as career oriented, the others non-career oriented. Responses to the personal background questions were tabulated and the results reported as percent of the total number responding.

RESULTS AND DISCUSSION

Career Orientation

In the group as a whole, 135 students (77%) were career oriented and 40 students (23%) were non-career oriented, compared to 45% career oriented and 55% non-career oriented in Almquist's (1971) study. Although this comparison probably shows a definite increase in career orientation in college females, the differences in the samples used in each case might explain the difference. Almquist's (1970) sample was composed of middle and upper class female students in a selective, private, high-tuition university. The sample consisted of rather frequent daters and high sorority membership (63%). The sample used in this study, in contrast, had a very low (21%) sorority membership and since only students in foods and nutrition courses were questioned, it may have included a number of those specializing in foods and nutrition, an area which attracts students interested in the traditionally male-dominated areas of science and math.

Seventy-five percent or 131 students were home economics majors. Of these, 73.3% were career oriented as compared to 88% of the non-home economics majors. This concurs with both Wagman (1966) and Almquist's (1971) studies that showed career orientation to be lower in home economics majors than in some others.

There appeared to be little correlation of career orientation with age or with college class. However, the numbers of students in some age and class groups was too small to draw any definite conclusions.

Career orientation increased with increased grade-point average up to a point, then decreased. This data is in conflict with Almquist (1971) who found no significant differences in grade obtained by career versus non-career oriented college women. This difference may be due at least in part to the rather homogeneous sample of students used in this study.

Almquist (1971) found non-career oriented students to be significantly more likely to be going steady, engaged, or married than the career oriented students. In this study, however, marital status seemed to have little effect on career orientation, but because the number of students who were in groups other than single were so small, valid comparisons are difficult (83% single, 2.2% married with children, 5.1% married without children, and 9.7% engaged).

Only 21.1% of the students were affiliated with a Greek sorority, another 8% with a cooperative house of some type. Among the sorority members, however, only 73% were career oriented compared to 78.6% of the cooperative house members and 78.2% of the non-affiliated students.

Almquist (1971) similarly found fewer career oriented students among sorority members. Sorority activities often involve maintaining social class and finding a marriage partner, generally ignoring any other type of career planning. Furthermore, the students who choose to join a sorority are probably more often from upper-class or at least upper middle-class families where the father is a professional and the mother is expected to be a helpmate to her husband, participating in volunteer community work which as Almquist (1971) has suggested often becomes a "career" in itself. Daughters of this type of family may be less likely to seek a career for themselves.

In contrast with Almquist's (1970, 1971) data, the number of different jobs held by students in this study had very little correlation with career orientation.

Parental Influence

Whether the student's father held a professional or non-professional position had little correlation with career orientation, but there was a slight negative correlation with increased educational level of the father through college undergraduate degree and a positive correlation with further increase in educational level. Almquist (1971) found that fathers of career oriented students had higher status occupations, but neither this nor the father's educational level was significantly related to career orientation.

Mothers provide role models for their daughters; therefore, it was not surprising to find that the employment status of the student's mother had a positive correlation with career orientation. Although Almquist (1970, 1971) found mother's employment more strongly related to career orientation (66% career orientation of daughters of working mothers versus 22% of daughters of non-working mothers) than this study indicated, career orientation was considerably higher with mother's full-time employment compared to either part-time or non-employment (housewife). Daughters of mothers employed, particularly full time, are able to see that combining a career and marriage can be done. Furthermore, career orientation increased markedly with increased educational level of the mother, whereas Almquist (1971) found mother's educational level was not significantly related to career orientation. Whether the student's mother held a professional or non-professional position had little correlation with career orientation.

Career Orientation Attitudes

None of the non-career oriented (NCO) students were interested in working if they had one preschool child, and only a very small percentage (2.5%) would work if they had two or more school age children. Furthermore, non-career oriented students were considerably less positive towards working with no children. Even within the career oriented group, however, there was a less positive attitude towards working if there were children, particularly with one of preschool age, than towards working with no children, indicating that career oriented students were no less concerned about child-care than their non-career oriented peers.

On the second question, concerning employment with at least one child (Table 2), none of the non-career oriented students preferred working full-time, and only 7.7% would work part-time as compared with 24.2% and 56.1% of the career oriented preferring to work full-time and part-time respectively.

On the third question, concerning aspirations 15 years in the future, none of the students chose a housewife with no children. Only two students (1.2%) showed a preference for the unmarried career woman alternative. Data from this future aspiration question indicates a definite trend toward career orientation when compared with Epstein's (1972) responses to the same question asked of female freshmen in 1965 and again in 1970. As Epstein has re-

TABLE 1—RESPONSES TO FIRST PERSONAL ASPIRATION QUESTION

I would work with:	SA	A	U	D	SD*	
A. no children***	68.6	20.5	1.1	.1	.1	% Total**
	74.1	15.6	—	—	.7	% CO
	50.0	37.5	5.0	2.5	—	% NCO
B. one preschool child***	8.6	8.0	23.4	29.1	14.3	% Total
	11.1	10.8	26.7	28.1	7.4	% CO
	—	—	12.5	32.5	37.5	% NCO
C. one school age child	26.3	35.4	16.6	5.1	4.0	% Total
	33.3	43.7	8.9	1.5	—	% CO
	2.5	7.5	42.5	17.5	17.5	% NCO
D. two or more school age children	26.3	31.4	19.4	8.0	5.1	% Total
	34.1	40.0	14.8	3.0	.7	% CO
	—	2.5	35.0	25.0	20.0	% NCO

*strongly agree, agree, uncertain, disagree, strongly disagree
**Totals may not equal 100 because some students misread the instructions and marked only one response.
***Researchers additions to Almquist's (1971) question.

TABLE 2—RESPONSES TO SECOND PERSONAL ASPIRATION QUESTION

Under these same conditions with at least one child, which of the following would you prefer?

			Response*			
A	B	C	D	E	F**	
6.5	5.8	45.0	18.7	4.7	19.3	% Total
.7	.7	56.1	24.2	1.6	16.7	% CO
25.6	23.1	7.7	—	15.4	28.2	% NCO

*Responses were as follows:
A. to participate in clubs or volunteer work
B. to spend time on hobbies, sports and other activities
C. to work part-time in your chosen occupation
D. to work full-time in your chosen occupation
E. to concentrate on home and family
F. other, explain briefly
**Most of the students who chose this alternative wrote in some combination of the other alternatives listed.

TABLE 3—RESPONSES TO THIRD ASPIRATION QUESTION COMPARED WITH EPSTEIN'S (1972) DATA

Response options:	Current Study	Epstein 1970	Epstein 1965
A. housewife with no children	0%	0%	0%
B. housewife with one or more children	14%	28%	35%
C. an unmarried career woman	1.2%	2%	3%
D. a married career woman without children	11.7%	2%	4%
E. a married career woman with children	73.1%	48%	42%
F. Right now I'm not certain*		19%	16%
	100%	99%**	100%

*Not used in the current study.
**One percent did not answer.

ported, however, data from this question (Table 3) do not indicate whether the student who chose marriage, career, and family intended to pursue all three simultaneously or at separate times in her life span. Furthermore, the student who chose "housewife" cannot indicate whether this is a choice throughout adult life or only temporarily during that period fifteen years from now.

Career oriented students also responded more strongly to most of the general attitude questions (Table 4) than did the non-career oriented students. Though both career and non-career oriented students agree or disagree with many of the same questions (#1, 2, 6, 8, and 9) the career oriented students were more likely to agree or disagree strongly. On other questions (#3, 4, and 5) there was less agreement between career and non-career oriented

TABLE 4—RESPONSES TO GENERAL ATTITUDE QUESTIONS

Question	SA	A	U	D	SD	
1. It is all right for women to participate in local politics, such as precinct work; but they should not hold the more important office in government.	3.5	2.3	1.1	30.5	62.6	% Total
	4.5	2.3	.7	27.6	64.4	% CO
	—	2.5	2.5	40.0	55.0	% NCO
2. Women should not try to compete with men in occupations that have always belonged to men.	2.9	.1	1.2	25.5	70.3	% Total
	3.4	—	1.7	21.5	73.4	% CO
	2.5	2.5	—	37.5	57.5	% NCO
3. There ought to be more women in the Congress of the U.S.	42.1	39.2	14.0	3.5	1.2	% Total
	47.0	40.2	9.8	2.3	.7	% CO
	25.6	35.9	28.2	7.7	2.6	% NCO
4. The old saying that "a woman's place is in the home" is still basically true and should remain true.	1.9	4.8	6.5	35.1	51.6	% Total
	—	4.7	4.7	32.4	58.2	% CO
	7.5	5.0	12.5	45.0	30.0	% NCO
5. In groups that have both male and female members, it is appropriate that the top leadership position be held by a male.	.1	2.4	4.6	31.3	70.9	% Total
	—	3.0	3.0	28.4	65.6	% CO
	2.5	—	10.0	42.5	45.0	% NCO
6. If there are 2 candidates for a job, one a man and the other a woman, and the woman is slightly better qualified, the job should nevertheless go to the man because he is likely to have a family to support.	.1	—	1.6	26.3	72.0	% Total
	.7	—	—	24.1	75.2	% CO
	—	—	7.5	32.5	60.0	% NCO
7. The talk we hear nowadays about women being an oppressed group in American society is really ridiculous.	4.0	11.4	13.2	43.6	27.8	% Total
	1.5	8.9	14.3	42.5	32.8	% CO
	12.5	20.0	10.0	47.5	10.0	% NCO
8. A woman does not need as much education as a man.	.6	1.1	1.7	24.1	72.5	% Total
	—	.7	.7	19.4	79.1	% CO
	2.5	2.5	5.1	40.0	50.0	% NCO
9. Women who insist on competing in the male world of work and politics tend to lose their femininity.	1.2	5.3	5.9	32.9	54.7	% Total
	1.5	3.8	5.4	29.0	60.3	% CO
	—	10.3	7.7	46.2	35.9	% NCO

students with the latter more likely to indicate uncertainty. The more diverse responses to question #7, involving thoughts on the oppression of American women, probably reflects the ambivalent feelings both career and non-career women have towards the much publicized women's liberation movement.

SUMMARY

Judging from this study, career orientation in college women is increasing. In this study of selected University of Illinois female students, 77% were career oriented compared with 27% of University of Illinois female freshmen in 1962 (Wagman, 1966) and 45% of female seniors in 1970 (Almquist, 1971).

Factors shown to be positively correlated with career orientation were grades in school, mother's employment, particularly if employed full-time, mother's educational level and college major.

Factors shown to have little or no correlation with career orientation were age, year in college, marital status, cooperative house membership, the variety of jobs held by a student, and the type of job (professional or non-professional) held by either mother or father.

Since the definition of career orientation used for this study included a combination of career with marriage and a family, the personal aspiration questions used to classify students were written accordingly. From a number of responses written in by students, apparently life styles other than marriage and family are becoming more popular. Future researchers of career orientation would probably benefit by re-defining career orientation to include other alternative life styles.

One might draw from this study two implications for career development of women: (1) The high incidence of career orientation found in this study, though perhaps exaggerated due to the sample used, clearly indicates that more and more college females are definitely

planning to be part of the labor force for at least some part of their adult life. Whether this trend is due to the women's liberation movement, directly or indirectly, one can only speculate. (2) The factors associated with career or non-career orientation, in this and other studies, give insight to us as educators and as parents as to what influences tend to direct our students/daughters to career orientation. Knowledge of these influences is the first step necessary in making changes in education or family patterns to expand and improve the career development of women.

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Seventy-two years ago Thorstein Veblen described the American wife's economic function as conspicuous consumer in leisure class marriage. In his definition, "leisure" was the conspicuous consumption of time in nonproductive activities—the appearance of leisure skillfully created by women through busywork activities unrelated to producing the economic necessities of life (for example, ornamental embroidery as opposed to making winter underwear). The purpose was to benefit not the wife but her husband, by defining his high economic status through her "leisure."

Today the middle class housewife's economic function is the same as Veblen described, but with this change: American women are taught the required leisure class skills for their wifely roles by their college education, and that education is itself a highly noticeable item of conspicuous consumption.

(from Ann Scott, "Educating American Women for the Leisure Class," in Educational Leadership, October 1971, p. 28.)

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EDUCATING THE WHOLE PERSON

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Educating the whole person! Do the words raise questions, resistance, or opposition in your minds? Are these words synonymous with other words that have, in the past, been criticized, bantered about, even misunderstood—words like permissiveness, life adjustment, progressive education, openness, indulgence, low standards, incompetence, needs curriculum?

Is "educating the whole person" just another slogan? Does it indicate that school people are deserting the cognitive emphasis and are off on another jag? Let us hope not! Rather, let us say that these words mean something like total, effective, balance, comprehensive, whole, all.

Recently there has been concern for the academic competence of many students who are graduating from high school. Some of these students are identified as being functionally illiterate. Yet these students have been in school during the period of great emphasis on cognitive development and academic achievement. Why have they not achieved? Could it be that programs with major and almost total emphasis on academics have disregarded the education of the whole child and the interrelationships of the mental, social, and emotional aspects of learning. The results are discouraging to say the least.

Consider the recent bombings, the bank robberies, and other violent crimes. Certainly something vital was left out of the education of those persons involved in such actions. Education of the whole child, however, is not the responsibility of the school alone. Other institutions have a share also. The above illustrations may indicate, nevertheless, what can happen when development of the whole child is not adequately provided for. Maslow said, "The unused capacity or organ can become a disease center or else atrophy, thus diminishing the person."[1]

In describing new strategies for teaching today, Frazier points out that:

> The whole child seems to be newly before us today. Over the past 15 or 20 years, we may be thought to have let our historic commitment to rounded development go by the board. Immersed as we were in trying to understand and do better by cognitive functioning, we may have forgotten the rest of the child. What we found, of course, is that when it comes to behavior, the child insists on putting himself back together again. Detached from the hand or the heart, mind does not function very well.[2]

What does it mean to educate the whole child and to utilize his capacity in all areas? Some would answer that a return to the "basics" is mandated. But what are the basics for youth today? According to Hal Wilson, director of the National Assessment of Educational Programs (NAEP):

> To many noneducators, the basics are the three Rs and a return to the *McGuffey Reader*. . . . But to others, sex education, for example, is one of the most basic of skills, and that is "the last thing the McGuffey Reader people want to talk about." . . . NAEP is developing an index of basic skills. For 17-years-olds, the six broad skill areas include: consumer skills, health maintenance, family relations (including sex education), use of community resources, citizenship (basic law and politics), and interpersonal skills.[3]

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[1]Abraham H. Maslow, *Perceiving, Behaving, Becoming* (Washington, D.C.: Association for Supervision and Curriculum Development), p. 83.

[2]Alexander Frazier, *Adventuring, Mastering, Associating: New Strategies for Teaching Children* (Washington, D.C.: Association for Supervision and Curriculum Development, 1976), p. 127.

[3]"State Assessors Are Back to Defining Basics" (Education U.S.A., National School Public Relations Association, Washington, June 28, 1976), p. 257.

Such objectives, says Wilson, will be difficult to assess because they are not specific to certain subjects. A look at the skill areas, however, indicates how much the classes in home economics can contribute. A look also reveals that if these objectives are to be realized, then the whole youth must be involved—the intellect, the feelings, and the emotions.

How can this be achieved? The content of the curriculum has been identified by Wilson, but the process of implementing the program is also important. Frazier suggests that the process includes *adventuring, mastering,* and *associating.*[4]

The air of expectancy on the part of both the teacher and the child is a part of adventuring. This means, for the teacher, accepting the child, the enthusiasm, the eagerness, the desires—not squelching or taking "it" out of the child. This air of expectancy indicates a belief that learning is going to take place and a willingness to make the effort necessary to ensure that the desired learnings do occur.

This expectancy and eagerness may be kept alive by adventuring. The challenge for the teacher is to keep this spirit of adventure alive in the school. Adventuring can mean, for the student, attempting, discovering, pursuing, and venturing in the natural environment, the school setting, the home, and the community.

Along with the provision for the eager, expectant youth must be the opportunity for mastery. Mastery comes not from external force or pressure but from the basic internal need, which all students have, to grow. Motivation comes from within and is closely linked with how one feels about the "self" and world. The role of interest must be maximized. The child learns by doing.

Providing opportunity for mastery is dependent upon our understanding of the student's natural powers, the level of competence, and our ability to match these with appropriate materials, activities, and methods. Too often mastery has been equated with rote learning which has not gone far enough to effect and strengthen learning.

When I was in the third grade illness kept me from school for several weeks. The teacher said that the class was studying "the tables" and that I should do the same. When I returned to school I had memorized the tables. I could say them all. But not until years later when I was studying how to teach arithmetic to children did I understand that multiplication is a short cut for addition.

Frazier says that, "nothing promises to do more to revitalize skills teaching than moving it onto an activity base."[5] Skills will probably continue to be introduced in practice sessions, but the development will depend upon their use.

The opportunity for associating is an essential facet of the process. Associating includes accepting, befriending, loving, supporting, touching, trusting, and working with others. The youth has much to learn that can be learned only from and with others as they work, play, and study together.

In educating the whole child, then, there is concern for body, mind, and feelings; the content of the curriculum, and the how of learning. Students *become* adequate. They are not born that way. The problem is not to find and coddle adequate persons but to get about the business of producing them as fast as we can. What students have to learn, they can be taught. Adequate people and personalities are not a gift. They are the crowning achievement of education—the product of our best efforts.

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[4]Frazier, *op. cit.*, pp. 27-111.
[5]Frazier, *op. cit.*, p. 128.

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The *Washington Post* of May 17, 1975 had a story headlined "1st Woman Scales Everest." A 35-year-old Japanese woman and her male Sherpa guide had reached the summit of the world's highest mountain during International Women's Year.

On June 4, 1975, the *Champaign-Urbana* (Illinois) *Courier* had a four-line filler: That housewife who was the first woman to climb Mt. Everest probably found no dust up there.

When the first man Edmund Hillary reached the top of Mt. Everest 22 years earlier, there was no follow-up filler: That man who was the first to scale Mt. Everest found no lawn to mow up there.

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Attitudes of Home Economics Teachers and Students Toward Occupational Education in a Rural State

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The occupational emphasis in home economics is no longer new. It was strongly supported in the Vocational Education Act of 1963, and in the 1968 Amendments to that Act. However, teaching occupational home economics courses has not been widespread in North Dakota. Even so, there is a steadily increasing demand for teachers who are prepared to teach occupational programs in various areas of home economics.

The study which provided the data for this article was primarily concerned with teacher and student attitudes toward occupational home economics programs. Such attitudes are a key factor in the potential for successful introduction of additional occupational programs in the state. Regardless of limited employment opportunities in specific localities, population mobility, especially of youth, gives strong reason to support occupational programs.

This article provides data about teachers and students in home economics classes in North Dakota during the 1972-73 school year. The two hundred and seventeen teachers in the study were listed in the North Dakota Home Economics Directory for 1971-72, compiled by the North Dakota State Department of Vocational Education.

Each teacher was sent a cover letter explaining the study, a sheet for supplying information about her educational background, teaching and work experience other than teaching, and statements for her reaction. Responses to the sixty-item questionnaire were designed, using a Likert-type scale, to determine teacher attitude toward including an occupational emphasis in home economics and the importance of including work experience as a necessary component of home economics programs for gainful employment.

Seventy-three percent of the teachers surveyed responded. A randomly selected group from the respondents was sent Nelson's job attitude survey[1] to administer to their ninth grade home economics students. Usable data was obtained from 688 students.

HOME ECONOMICS TEACHER PROFILE

Professional Education

Forty-three percent of the teachers reported that they held a first grade professional teaching certificate while forty-two percent held either a secondary life or professional standard teaching certificate. Ninety-two percent of the teachers reported the bachelor's degree as the highest earned degree. Slightly more than three-fourths of the home economics teachers listed home economics education as their major in college. One-half of the respondents earned bachelor's degrees after 1963. Thirteen percent of them earned the bachelor's degree more than thirty years ago.

Teaching Experience

Almost one-third of the home economics teachers had been at the present place of employment for five years or more. Forty-two percent of the respondents had never taught in any other school system previous to present employment. Forty-four percent of the home economics teachers responding to the questionnaire were teaching in combination junior-senior high schools. Only two percent of the teachers taught only courses intended to prepare students for gainful employment (occupational home economics).

This research was conducted while the author was Chairperson of the Home Economics Department at the University of North Dakota and was supported by a University of North Dakota faculty research grant award.

[1]Marjean Christine Nelson, "The Development and Testing of a Home Economics Entry-Level Occupation Attitude Inventory (unpublished Masters Thesis, University of Nevada, Reno, 1968).

Work Experience

One-fourth of the home economics teachers reported no work experience other than teaching. The most recent work experiences reported were summer jobs (38% at part time, 34% at full-time employment) held during the years from 1965-1969 (25%) and 1970-1972 (17%). The types of work most frequently reported were in business establishments unrelated to home economics, in positions other than sales clerks.

Teacher Attitudes Toward Occupational Home Economics

A sixty-item questionnaire using a Likert-type scale was used to determine teacher attitude toward occupational home economics. It was designed to explore teacher attitude toward three factors that are central to the successful implementation of occupational programs: (1) including an occupational emphasis in traditional home economics programs, (2) feelings toward the "disadvantaged" as a class of students, and (3) the importance of including work experience in home economics programs planned to prepare students for gainful employment.

Statements with which home economics teachers agreed most strongly were:

- Work experience programs need to be consciously concerned with developing positive work habits in youth.
- Students can learn that there is intrinsic satisfaction in a job well done.
- Accurate evaluation of work experience depends on cooperation between trainee, teacher, and employer (job supervisor).
- Students in occupational home economics programs need approval from the teacher or job supervisor to know they have met work standards.
- Work experience programs help the student evaluate his vocational aspirations against his opportunities, educational achievement, personal abilities and characteristics.

Statements with which home economics teachers disagreed most strongly were:

- In situations where the trainee receives compensation from the employer, no credit should be given for the work experience portion of occupational programs.
- Employment education is primarily for the slow learner.
- When completely equipped, the classroom can simulate the work environment so that on-the-job training can be eliminated.
- Students can produce efficient job analysis by observation only.
- Teaching safety procedures is more effective if delayed until training is provided on the job by the immediate supervisor.

Statements about which home economics teachers were most undecided were:

- Work experience programs can provide training for all responsibilities, regular and occasional, attendant upon a particular job.
- Work experience of less than two weeks duration is of little value.
- In school work, disadvantaged youth are less creative, motivated, or proficient than any other group of students.
- Supervisors should withhold praise unless job performance merits it.
- Work experience provided within the educational institution, such as in school lunch programs or nursery schools, is less effective in preparing trainees than outside experiences.
- Students who have the ability to continue education beyond high school will elect courses at the high school level which prepare for employment.

Significant Findings

There was no significant difference between home economics teachers in rural and urban schools in attitude toward including the occupational emphasis in home economics. Also, there was no significant difference between home economics teachers in rural and urban schools in attitude toward the disadvantaged student. However, there was a significant difference (.01 level) between home economics teachers in rural and urban schools in attitude toward the importance of including work experience as a necessary component of occupational home economics programs.

Because North Dakota is primarily a rural state, the analysis of data used a population of about 25,000 as urban. The data in this research indicates that home economics teachers in urban schools view work experience as a necessary component of home economics programs for gainful employment more than do home economics teachers in rural schools.

Student Experience in Home Economics Classes

Seventy-two percent of the ninth grade home economics students responding to the survey were enrolled in vocational home economics programs. In North Dakota the term "vocational home economics" refers to programs receiving reimbursement from federal vocational funds. The great majority of all students (97%) responding to the survey were girls. Students were evenly divided into groups having had home economics before the current course and those who had no previous experience in home economics classes. Twenty-four percent of the students reported they had taken home economics only in grade eight while twenty-one percent reported taking home economics in both grades seven and eight.

Parents' Education, Income, and Work

The educational background of both fathers and mothers of ninth grade home economics students ranged from below sixth grade to graduate school. However, students reported twenty-three percent of their fathers graduating from high school and twenty percent graduating from the eighth grade as the highest level of education achieved. Approximately nine percent of the fathers were college graduates, while eleven percent of them had attended college but not graduated.

Students reported thirty-six percent of their mothers graduating from high school and fifteen percent graduating from the eighth grade as the highest level of education achieved. Eight percent of the students' mothers had graduated from college while another twelve percent had attended college but not graduated.

The most frequently (29%) reported source of parents' income was profits and fees from a business or profession, followed by wages (28%), and salary (26%). Fathers' work was most frequently reported as farm, blue collar, or business. Mothers' work was most frequently reported as business, but less than one-half of the mothers worked outside the home.

Job Awareness

Jobs listed most frequently by students as those they "could describe" were: housekeeper, babysitter, waitress, cook, baker.

Jobs listed most frequently by students as "I never heard of this job" were: case aid worker, family dinner service specialist, dyer, presser, clothing maintenance specialist.

Job Aspirations

Jobs listed most frequently by students as those they were "eager to learn" were: child care attendant, visitor in child's ward, babysitter, nursery school assistant, VISTA or Peace Corps worker.

Jobs listed most frequently by students as those they would "refuse to learn" were: cleaner, cleaning service operator, presser, seamstress, manager or owner of catering service.

Students enrolled in ninth grade home economics classes listed the home economics-related job areas they would like to work in most as: working with people and child care.

Findings

There was no significant difference in awareness of and aspiration toward home economics-related jobs of ninth grade students enrolled in home economics with the year the home economics teacher received her degree, the teacher's work experience other than teaching, or the region of the state in which the school was located. In addition, neither the level of educational achievement of parents nor the kind of work that parents did significantly affected awareness of, or aspirations toward, home economices-related jobs of ninth grade students enrolled in home economics programs in North Dakota.

There was no significant difference in the home economics-related job aspirations or preferred job areas between ninth grade home economics students in rural and urban schools. However, there was a significant difference (.05 level) in awareness of home economics-

(Continued at bottom of next page)

LEGAL INCORPORATION—
A New Lease on Life for the American Family?

David P. Snyder

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"For decades, we have watched what many have thought was the disintegration of the family, as its traditional functions have been pre-empted by other social institutions in the industrializing world; as mobility has increased; and with increasingly single-standard sex freedom."

Sol Tax, Professor of Anthropology at the University of Chicago and Director of the Smithsonian Institution's Center for the Study of Man, wrote the foregoing to introduce an article in the February 1976 *Center Report*, the magazine of the Center for the Study of Democratic Institutions. In summing up the commonly-held views of many observers however, Tax was not merely setting the stage for another jeremiad on the perilous outlook for the post-industrial family. Rather, he was introducing a proposal for a totally new approach to strengthening the family and its ability to function beneficially in today's socio-economic environment. Simply put, the professor's proposal is *to provide the family unit with a legal entity as a corporation.*

The concept of the corporate family began to crystallize shortly after Tax had attended a 1975 conference on "Social Policy, Social Ethics and the Aging Society." The discussions at the conference tended to focus upon such familiar institutions as retirement communities, health maintenance organizations, social security, etc., and upon individuals and groups of individuals as recipients of services. Throughout the meeting, however, Tax observed that "there was a complete by-passing of the family as a unit of the larger society."

This omission led the professor to review a wide range of major public programs and to conclude that, with the exception of the rudimentary tasks of revenue collection and census

(Constance McKenna's article continued from page 188)

related jobs between ninth grade students in rural and urban schools. Students in urban schools were more aware of home economics-related job opportunities than were students in rural schools.

There was a significant difference (.05 level) in home economices-related job aspirations between ninth grade home economics students in classes taught by junior high school teachers (grades 7-9) and those in classes taught by senior high school teachers (grades 9-12). Also, there was a significant difference (.001 level) in job areas ranked as desirable between ninth grade home economics students in classes taught by junior high schools teachers and those taught by senior high school teachers. Ninth grade home economics students in classes taught by junior high school teachers (7-9) had higher aspirations for home economics-related jobs than did ninth grade home economics students in classes taught by senior high school teachers (9-12).

There was a significant difference (.05 level) in home economices-related job aspirations between ninth grade home economics students who have had home economics in grades seven and eight and those who have not. Ninth grade students taught by teachers having sole responsibility for traditional home economics programs have greater awareness of home economics-related job opportunities than ninth grade students taught by teachers having responsibility for home economics programs for gainful employment.

enumeration, *government essentially ignores the existence of the family.* Further, in re-examining the works of the 17th and 18th century political philosophers upon whose insights Western democracy was based, Tax found that the family goes almost totally unmentioned. "Individual rights," as they were thought of at the time, referred to the male citizen and his entitlements to *his* property, *his* wife and *his* children.

Tax concluded, therefore, that the propensity of Western democracies to deal with individuals rather than with families was as much a consequence of our intellectual history as it was the result of socioeconomic imperatives. Today, "individual rights" means exactly that—the rights of the individual citizen, irrespective of race, gender, religion, or family status. Meanwhile, no role or rights for families are addressed by our major public policies or programs, except in the most limited way.

In spite of the foregoing, the family has always been, and still remains one of the most powerful elements of our expressed social values and our political and religious rhetoric. It was this striking dichotomy between social values and politico-economic reality, and the further perception that U.S. public policy either ignores or exacerbates this situation that prompted Tax to begin searching for a means of strengthening the family's function within the post-industrial environment. His search led him to the idea of *the corporate family*, a concept which has since generated enthusiastic interest in a number of quarters.

THE CORPORATE FAMILY

As Tax first conceived the idea, the authorization of a new type of legal entity (e.g., partnership, co-op or small, non-profit corporation) could be legislated, under which family groups would be able to pool certain resources such as health and life insurance, pensions or social security. By definition, family corporations would be voluntarily chartered and would initially extend vertically (over generations), with new members acquired through birth and marriage. The enabling legislation would also prescribe the means for individuals to leave the corporate group, for groups to be dissolved, and for membership to extend horizontally, including the possibility of "adopting" otherwise unrelated individuals. In our mobile society, geographic propinquity would not be a requirement for group membership.

In order to significantly enhance the family's socio-economic utility or viability, it would be entitled to incorporate only in an "extended" form (e.g., involving at least two adult generations or two pairs of married siblings). A child born into a corporate family would automatically become a shareholder, with the value of his or her share coming from the common funds left to the corporation by deceased members. Beyond this initial entry, however, membership in a family corporation would be voluntary for all adults. The act of forming such a group, or of joining an existing group upon marrying one of the members would be guaranteed as a right of all individuals.

A corporate family would, of course, have to adhere to the formalities normally required of such fictive legal entities (e.g., orderly record-keeping, strict accounting, financial responsibility and disclosure, etc.). Having instituted such formalities, the family would benefit to the degree that it could interact with other private and public sector organizations which provide economic advantages to groups (e.g., travel, insurance, pension plans, etc.), and which limit individual liabilities in interorganizational agreements (e.g., loans, contracts, etc.). However, Tax's greatest hope for the beneficial utilization of the corporate family is largely contingent upon the administration of social services which are currently directed at individuals (e.g., unemployment, rent supplements, etc.) being optionally offered to family corporations as a matter of public policy to promote the growth and spread of the new institutional form. Under such policy, *social services would utilize rather than replace family ties.*

The concept for family incorporation was first presented to a Dialogue Session at the Center for the Study of Democratic Institutions in September, 1975. The general conclusions from that session were summarized in the February 1975 *Center Report* Magazine. Tax reports that this article has generated considerable interest and many requests for reprints. Among those volunteering interest was Democratic Vice-Presidential nominee Senator Walter Mondale. Several major conferences have since included discussions of the corporate family, including a June 1976 meeting on "Education and Family Life," sponsored by the U.S. Office of Education. The concept is currently being examined in two departments of the Federal government, and is also discussed in the September 1976 issue of *The Journal of Applied Behavioral Sciences*, which is devoted entirely to the "Self-Help" movement.

In discussing his proposal, Tax is quick to point out that the family as an institution has considerable strength in the U.S. beyond its rhetorical appeal. In spite of the increasing predominance of the nuclear family in urban and suburban America, extended family networks function effectively across great distances, particularly among the black, Hispanic and American Indian sub-cultures. Further, the high volume of long-distance telephone traffic during non-business hours, and the enormous peak loads at holiday times reflect the continued personal and emotional commitments of families dispersed by their individual personal pursuits. Thus, Tax reasons, there would be a substantial number of families willing and able to avail themselves of the advantages offered by incorporation should it be made available, notwithstanding the deterioration which the extended family may have suffered through the institutionalization of many of its functions, or through generational conflicts and changing sex roles.

THE FAMILY AS AN ECONOMIC ENTITY

The concept of an intergenerational family economic unit is not new, of course. The rural manors of 18th and 19th century Western Europe generally functioned as family-run development projects, with the management of current production, the design and construction of new plant and facilities (including entire towns), marketing, welfare, agricultural and civil engineering, and even minor judiciary functions assigned to various members of the family. (Usually, alas, these were the male members, although in England, the operation of the manor house, which involved a large staff and tens of thousands of dollars per annum, was often assigned to the squire's wife or to the eldest daughter.) Even more significantly, the middle class of merchants, bankers and professionals initially formed and prospered around intergenerational family businesses.

Although a limited number of powerful family dynasties did emerge during the rise of industrialism, families were not crucial to that process as they were to the rise of mercantilism. However, several thousand family corporations of a different sort were established in the United States during the late 19th and early 20th Century, and hundreds of them survive today in the major cities of the East Coast. Called simply "Corporations" or "Groups," these organizations collected funds to pay for the emigration of relatives from Europe, and to make interest-free loans to family members for establishing businesses or getting an education once they had arrived in America.

In summary, the family as a co-operative economic unit has an extensive and continuous history in Western society. Moreover, in spite of some substantial deterioration in traditional extended family forms and functions, the basic values and relationships of our family structures appear to remain intact and capable of reassuming a number of their lost functions if given the opportunity. Finally, and perhaps most important of all, a number of ancillary social and economic benefits might be realized through family incorporation beyond the immediate strengthening of the familial institution. Those benefits would include:

- More accurate accounting for economic activity, most particularly, *the first general accounting for mother/homemaker contributions to the GNP.*
- Substantial economic efficiencies derived from the pooling of inter-generational and extended-family resources, thereby returning to the family an economic utility which it had possessed in an agrarian economy, but which it had largely lost in the urban-industrial economy.
- Greater social and economic stability for individuals experiencing fluctuating income levels due to illness or injury, schooling (including mid-career education), unemployment and underemployment, or retirement.
- Provision of a single, commonly accepted form for the wide variety of affinity groups currently evolving in our society (e.g., communes and group, contract, and open marriages), thereby simplifying or eliminating many problems faced by social programs and economic and tax policy in responding to current changes in our social institutions.
- Fuller realization of the synergistic potential of the family group, and the mutual services, collective intelligence and common comprehensions inherent to such groups, while permitting a much greater flexibility of internal roles than is allowed by the traditional family structure.
- Establishment of a whole new set of stronger, clearer, commonly-accepted social roles and individual orientations than is offered in our present-day society, where there is no

standard, meaningful group below the institutional level. Among other things, this would improve the individual's ability to cope with, confront and correct institutional ineptitude and arrogance, thus reducing the impetus for extreme individual acts (e.g., terrorism, vandalism, etc.) while generating more effective forces for institutional reforms.

A NATION OF CORPORATE FAMILIES?

Over the long haul, a nation comprised of corporate families would be much better equipped to function in the socio-economic environment which appears to be evolving in America today (e.g., *The Temporary Society*, by Warren Bennis and Philip Slater; *The Unprepared Society*, by Donald N. Michael; *Beyond the Stable State*, by Donald Schon; *The Age of Discontinuity*, by Peter Drucker, etc.). These and many other authors envision the following characteristics emerging over the next quarter century:

- Career patterns which increasingly reflect a sequence of study-work-sabbatical cycles.
- Decreasing employment in production work (associated with fixed, physical facilities and processes) and increasing employment in knowledge work (e.g., research, policy and systems analysis, software design, ideagenetics, etc.), associated with transient combinations of unique individual capabilities, and access to universally distributed data and information technologies.
- Increasingly flexible institutional forms, designed to adapt to changing external imperatives and internal problems, gradually replacing many of the more rigid hierarchical institutional forms of the present.
- Expanded applications of ever-cheaper information technology and communications networks, with home computer terminals for routine household tasks (remote shopping, accounting and record-keeping, etc.), and for child/adult learning and work at home.

In conclusion, the corporate family, *as a profit-making institution,* would seem ideally suited to be a basic component of a knowledge-based society, just as the extended family group served as a basic component for the agrarian and mercantile societies. The family group would provide stability and continuity in a society of temporary organizations. It could supply the resources and stable infrastructure necessary for individuals to acquire education and access to the technology required to participate in an information economy (i.e., an economy based upon the creation, purchase, and sale of knowledge, ideas, and analytical or problem-solving skills). At the same time, in an information economy, a corporate family would lack the restrictive sterility of the old "family firm," which generally required the son(s) to follow in the footsteps of the father.

In a 20th century corporate family, an insurance broker, a psychologist, an industrial designer, and a systems analyst might work independently or in any of a variety of combinations, making shared use of the communications and information technology essential to them all.

In fact, the array of unique combinations of expertise which would be likely to emerge from a large number of corporate families would respond rather nicely to the emerging highly-specialized information needs of the post-industrial era. Moreover, functioning in a competitive market of "knowledge jobbers" to large private and public sector institutions, corporate families would serve to balance the economic power wielded by macro-institutions. With the advantages of high flexibility and low overhead, family corporations might eventually supplant many middle management and staff functions of large organizations.

MEDIAN INCOME OF YEARROUND WOMEN WORKERS

Major Occupational Group	*Income*	*As Percent of Men's Income*
Professional & Technical Workers	$9,587.00	66%
Nonfarm Managers & Administrators	$9,195.00	59%
Clerical Workers	$6,868.00	60%
Sales Workers	$5,114.00	41%
Operatives (Including Transport)	$5,848.00	58%
Service Workers (Except Private Household)	$5,206.00	60%

(From Women Workers Today, U.S. Department of Labor, Employment Standards Administration, Women's Bureau, 1976, p. 9.)

The Nature and Significance of Home Science Education in Kenya

Julia Gitobu and the Editor in the patio of the Nairobi Hilton (Kenya).

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MEANING OF HOME SCIENCE

The interpretations of the term "Home Science" are many and varied depending on the degree of contact with the discipline by those making the interpretation. Although different names may be used in different countries to describe the field, its objectives remain unchanged. In Kenya, like in various other African countries, it is known as Home Science. As the name implies, it incorporates the sciences related to the subject. This supports one of the objectives of teaching the subject in schools which calls for "technical and scientific knowledge useful to the welfare of home and family living (Ministry of Education, Kenya, 1975). Scientific or technical knowledge about food, textiles, household appliances and agents is both important and useful to individuals, families, communities and the nation in modern times. The traditional term of "Domestic Science" indicates the same implication that certain aspects of science are necessary for effective preparation of individuals in this area. But there has been an evident attempt universally to move away from the word "domestic" due to various misinterpretations that have been associated with it especially at the academic levels. The term "Home Economics" is widely and internationally used and has wider implication as it includes household economics. This probably explains why it is more easily and widely accepted as a study in the area of social sciences. All this goes to show that Home Science or Home Economics is an integrated study and for adequate preparation of individuals, its related aspects need to be incorporated.

To many, Home Science revolves around the art of cooking and sewing. Although more and more people are now coming into contact with this area of study, thus increasing the understanding of its content, there is still a misconception about the objective of offering Home Science Education. One of the general objectives of teaching Home Science in schools in Kenya is to give the participants basic knowledge related to a better way of life and to equip them to become better members of their communities and society. This ties in closely with the broad objective of general education in which a student is helped to develop and understand his or her responsibilities as a member of the community. Thus for any type of learning to be considered really adequate, it should incorporate the other disciplines that help the individual to adapt more easily to the changing situation of the community and nation as a whole. To this, Home Science is not an exception. Another equally important objective is the need to encourage students and other individuals not only to appreciate but also to preserve and maintain their own culture. The need for this realization has become even more apparent today than ever before because many aspects of African culture are being forgotten and relegated to the past. Also the value system of each African community has undergone many changes due to the attitudes of modern generations towards traditional ways of life. Such changes are more evident in such aspects as food habits, dress, etc. Far reaching cultural changes have been wrought upon our societies by the social and economic changes. But besides gaining an appreciation of their cultures, Home Science students also need to know, understand and appreciate other cultures. This not only educates them but also helps to fit them into the international community.

THE NATURE OF HOME SCIENCE PROGRAMS IN KENYA

Home Science Programs offered at various levels are wide in scope. In Kenya the major areas of concentration in the teaching of the subjects are foods and nutrition, clothing and textiles, and home management. The last subject includes laundry, house care, child care,

family relationships and family housing. These areas are taught through the school system, particularly where girls form part of the student population in any institution. The relevant courses are taught right from the primary or elementary level to university level and other institutions of higher learning.

Although there is normally a high percentage of girls in Primary Schools, less than half of them ever get an opportunity to advance to a higher institution where Home Science is taught at a higher level. Others hardly learn any Home Science due to problems such as shortage of equipment, materials, facilities, qualified and interested teachers, disinterested attitude towards the subject by some administrators, etc. But with the Government's plan to improve the standard of teaching Home Science at primary and other levels, it is expected that there will be more student participants in this area of study at the primary level in the near future.

At the secondary level there are few problems associated with the teaching of Home Science subjects. In Government aided schools the subject is compulsory in the first two years but thereafter the girls can opt out or continue with any of the three areas of Home Science up to ordinary level (East African Certificate of Education)[1] depending on what is offered in their particular institution. The initial elementary course at the secondary school level is thoroughly integrated in order to give a well-balanced background. After this stage the course is more streamlined to enable students to concentrate on a specific core area. All the three core areas in Home Science are examinable at the ordinary ("O") level independently. Judging from the available figures, of all the secondary school students in Kenya who studied Home Science subjects at ordinary level in 1974, about 60% studied clothing and textiles as compared to 23% for home management and 17% for food and nutrition. In 1975 there was a small percentage rise (3%) in the number studying foods and nutrition and a similar percentage drop for clothing and textiles while the participation in home management remained at the same level as in the previous year.

At the "A" level,[2] clothing and textiles and foods and nutrition have been offered as principal subjects for about four years now. A paper known as Science in the Home is also offered but examined with the Foods and Nutrition papers. Although the present participation at this level is low, it is felt that a great deal has been achieved in establishing the program and the future is promising. At present only a few schools offer the named Home Science subjects at "A" level. The major problem is likely to be due to inadequate facilities and resources rather than the problem of teaching staff. But since these subjects are examined at the principal level they enhance the opportunities for further education within and outside the country.

The clothing and textiles area is the more popular Home Science subject in schools. The popularity is probably due to the degree of interest and involvement by both teachers and students. This is in turn due to the availability of interested teachers, material resources and equipment. The other two core areas are rather expensive to establish and maintain and so fewer schools offer them. However, more schools are being encouraged to offer home management because of its integrated nature.

At the University level, degree courses are offered in the same basic areas with the other related disciplines. The department of Home Economics (Home Science) is presently situated at Kenyatta University College which is a constituent College of the University of Nairobi. At present this is the only institution that offers the subject at degree level in East and Central Africa. The University College being a College of Education, most of the Home Science students are prepared for the teaching profession. The Bachelor of Education (B.Ed.) degree is awarded by the University of Nairobi to those who have completed the course. The tendency to specialize in one specific area is reduced by the fact that a student taking Home Science subjects must also take another subject with education. This enables the outgoing graduate to teach in more than one field. While pursuing Home Science, the students study all the core areas and other related aspects such as sociology, economics, food science, consumer education, etc. The number of students pursuing the subject at University level in Kenya is low and constitutes about 1.3 per cent of the total student population. It is, however, hoped that with the future expansion of the institution the intake for the Home Science course will increase. Most of the graduating students are absorbed into the teaching profession within the educational system but a few enter other sections of the public service and the private sector.

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[1] "O level" or ordinary level is the academic standard attained at the end of the four years of secondary education and is achieved after an external examination. The examination results are graded from Division One to Four to represent the highest to the lowest level of achievement.

[2] "A" Level is attained after 2 years beyond "O" level.

Other institutions that offer Home Science include the teacher training colleges most of which train teachers for the primary school level. There are 17 primary teachers' colleges which prepare three common grades of teachers for that level. The primary teacher grade one (P1) consists of young men and women who have successfully completed the secondary school education and have passed in division two and above. Grade two (P2) consists of those who have attained division three standard. The primary teacher grade two (P3) is a course for those who have completed at least two years of secondary school education, while the lowest grade (P4) is made up of those who have completed the seven years of primary education. Only three out of the seventeen teacher training colleges offer training facilities for the lowest grade, and it will eventually be phased out. The higher the grade of the teacher, the higher the level that s/he teaches. The Home Science course offered at this level is aimed at preparing teachers to teach the same subject at the primary level. With the recent implementation of a specific Home Science program at college level the rate of participation in primary schools may continue to increase remarkably.

Agriculturally based institutions, e.g., Egerton College, offer a diploma program in Agriculture and Home Economics (Home Science). The focus in such an institution is usually agricultural extension. The courses offered to Home Economics students constitute about 60% Agriculture and 40% Home Economics. The two types of programs offered for both men and women include human nutrition and food science and planning for better family living which includes population education. These programs are initiated for rural development where more women are involved in agricultural production. The graduates of such institutions finally offer their services to the community and the nation.

Other institutions that teach some aspects of Home Science are private ones. These take the line of training institutions with the aim of producing people who can be absorbed in both public and private sectors. The other body that takes keen interest in the progress of Home Science Education is the Home Economics Association which is a voluntary and professional organization. The association tries to promote and encourage the improvement of teaching Home Science at various levels in the country.

It is clear that historically Home Science in Kenya has moved a long way from the position of its being regarded as subject taught only to enable girls to be better wives and mothers to the present stage whereby it is recognized within the school curriculum as a subject occupying the same status as other subjects taught in schools and institutions of higher learning. Also the male participation in Home Science programs is negligible and maybe we can dare to look forward to the day in the near future when such programs will not be entirely for girls and women but also for boys and men. After all the girls are also being encouraged to train in woodwork and carpentry, etc., in Teacher Training Colleges in Kenya.

THE SIGNIFICANCE OF HOME SCIENCE EDUCATION IN THE KENYAN COMMUNITY

Whether it is aimed at achieving individual, community or national goals, Home Science education offers relevant and positive experiences to the participants. It helps to change the attitudes of those involved and facilitates the process of development. The question that comes to the mind of many people is whether Home Science education is complete at the point of leaving school. As stated above, the number of students taking Home Science courses above secondary school level is negligible. Many would also argue that there is need for more practical application of the knowledge acquired. Such education needs to be relevant to a changing society with a changing value system. It should also be considered and planned in the context of cultural traditions and current economic and social conditions. In this respect, for example, desirable trends in food consumption in a community or culture could influence nutritional improvement and so would desirable trends in family life.

As stated in one of the objectives of Home Science mentioned earlier, the student gains the basic knowledge related to a better way of life thus promoting individual growth. This type of education offers an opportunity for personal growth in many aspects and, therefore, all areas of Home Science encourage personal improvement. For example, information on clothing encourages changes in personal appearance while food and nutrition and home management centers most of the teaching on the health of the family and individual. The individual also develops desirable personality traits such as a sense of responsibility, independence, confidence, and social acceptance. The rate of acquiring new or basic knowledge is in

relation to increasing technological developments which one copes with in daily life. This type of change requires a great deal of flexibility as it relates to all aspects of Home Science. New products, household items, and appliances call for continued education for the individual. However, this type of change seems easier than that connected with food habits and family life. It is all the same appreciated that the knowledge of the economic system and the allocation of available resources such as money, time, etc., helps the individual to learn to face life more realistically. The personal preparation acts as a basis for acceptable membership in one's own society and develops ability to fit into other societies when the need arises, and this is happening with increased frequency. The attitudes of the individual may also have a long-term effect on the community. It is therefore important to cultivate positive attitudes in these individuals during their basic preparation in Home Science Education.

When an individual has acquired the basic knowledge as the future foundation, a career comes into consideration. And with this knowledge, career opportunities are diversified and whether it is in the teaching profession, social work or other, the individual's contribution to the community cannot be minimized. Besides this, there is the satisfaction of individual needs. Both recognized and unrecognized needs should be planned for adequately. The individual may be aware of some needs but unaware of others which are identified in the course of gaining new knowledge. It is evident, too, that individuals require the necessary background in order to be able to identify their needs, and Home Science should provide this background. All individuals like to achieve the best for their development although with some degree of variation or bias. The type of bias necessary is particularly useful to many African societies which have been affected by the introduction of some aspects of Western culture. The need for some degree of discrimination is strengthened even further by Ruud and Hall[3] when they state that "man fights to preserve what he feels is good and strives to change what he feels is undesirable."

In the process of initiating any type of change, individual values are extensively affected because new knowledge may force individuals to express their individuality, desire for change and possibly opposition for some of the traditional patterns of one's culture. The Molnos argument that "traditions belong to the past and that modern, rational people only need to be given good reasons for change and they will adopt any innovation that is advantageous to them"[4] is also true to some extent in relation to the teaching of science and the process of importing the relevant new knowledge to the individual. It is noted that the school curriculum content includes information relevant to Home Science education but more attention should be paid to the problems experienced by individuals and possible solutions to such problems found. Home Science has the capacity to make meaningful and beneficial contribution in developing the individual and promoting correct attitudes to life.

The relevance of knowledge gained by individuals is clearly shown in its application to home related roles such as parenthood and marriage. It is, therefore, natural for women to show greater interest in the affairs of the home, and their interests in this sphere may vary from those of their male counterparts.

In preparing the individual, the teaching of Home Science should also prepare and stimulate the community spirit in the same individual. The courses offered not only relate to the home but also to the physical and social environment of the individual. Homes and families are the smaller units of the community and thus meeting the needs of such units help to strengthen the community. Since societal attitudes about certain needs probably influence the feelings and the participation of an individual, the preparation of such individual should be in line with the expectations of the community. The knowledge gained by the individual is largely dedicated to professional service to families and the community but there is also the need for such information to reach the disadvantaged such as those who had no opportunity to learn through Home Science programs or those who never benefited from formal or non-formal education. It is generally accepted that Home Science is concerned not only with the analysis of families but with assistance to them. While trying to understand these families, therefore, there is need to get more involved in activities that help them improve their quality of life, e.g., nutrition education, family life education, institutional management, etc. Values important to home life are also important to the community and therefore the preparation of the individual should revolve around the value system of the community. In

[3] J. B. Ruud and O. A. Hall, *Adult Education for Home and Family Life* (New York: John Wiley & Sons Inc., 1974), p. 26.

[4] A. Molnos, *Cultural Source Material for Population Planning in East Africa,* Vol. 1, *Review of Social-Cultural Research 1952-72,* p. 41.

teaching Home Science the needs of the community need to be identified and means to satisfy them provided. The background information of the community is essential for the effective preparation of the individuals. In promoting nutrition education in a community, for example, the dietary patterns, customs and traditions of a people should form a part of the required information. Essentially, the training given to the individuals must help them to fit into the community and be an integral part of that community. The ultimate goal of any individual is to be an appreciated member or citizen of the nation. It is believed that failure in any form of education creates social and economic problems such as delinquency, unemployment, chronic dependence, waste of human resources, and loss of productive power. Home Science is not an exception to this and therefore a program that fails to achieve the desired goal contributes to the failure of achieving national educational goals. The nation is provided with useful labor or resources such as teachers and social workers as a product of Home Science programs. Also the provision of knowledgeable homemakers should be treated and accepted as a valuable contribution to the nation. Educators in the nation can use the knowledge of the individual family and community to plan home-making programs. This is particularly necessary when planning specific programs at both primary and high school levels. Since the resources of the nation are shared by all including those participating in Home Science programs, then everyone is expected to contribute in one way or another to the development of the nation. If any program has to be of benefit to the nation it has to start with collective and individual interests. Therefore Home Science should be adapted to national service as one of the easily available national resources. In order to preserve culture in Kenya and other African nations, every member of the nation has to contribute to the best of his/her ability. Therefore, within the various areas of Home Science, the desirable cultural traits should be preserved.

CONCLUSION

It is evident, therefore, that there is an interrelationship between the needs of individuals, the community and the nation as a whole. The goals have a lot in common. The individual strives to improve himself as a member of a specific community which in turn is improved by groups of individuals forming it. By being a member of the nation the individual within the community is expected to offer appropriate services for the promotion of social and economic welfare. Therefore, the performance and success of each category depends on the other two. The question here is whether there is a relevant approach which could be used to direct them to serve a better purpose. Other questions, such as how should relevant programs be organized to meet the needs of individuals and society, arise. Or would such programs achieve the goal by being more relevant, specific, adequately broad, etc.? There is also the question of whether or not the graduates of a Home Science education are able to adapt to the social and economic changes that at present are overtaking the existing programs. There is need for the frequent evaluation of such existing programs regarding participation, attitudes and the extent to which these programs produce favorable changes. There is no doubt, however, that the present efforts to encourage greater participation in Home Science programs will be very fruitful and rewarding to the entire country.

Julia Gitobu and family at home.

AN AMERICAN VISITS HOME ECONOMICS IN DENMARK

Judy Brun
Assistant Professor
Home Economics Education
University of Illinois
Urbana-Champaign

In January, 1976 I responded to an invitation from Mrs. Edith Kjaersgaard, Inspector for Home Economics in the Danish Ministry of Education, to become better acquainted with "Dansk" home economics. Armed with good directions and translations from my Danish husband, I set out through the streets of Copenhagen (København). Slushing through snow and rush hour crowds, I first visited a home economics school and then plodded on across town to meet Mrs. Kjaersgaard. I would like to share some of my experiences and perceptions from these visits and describe a couple of aspects of home economics in Denmark that are not the direct responsibility of the Inspector of Home Economics and therefore not covered in her article.

SUHR'S SEMINARIET AND HUSHOLDINGSSKOLEN

Edith Kjaersgaard had made arrangements for me to visit Suhr's, a private school subsidized by government funds, and operating two types of home economics programs, one for teacher education and the other for vocational education. The director of the school, Hanne Sondergaard, was counseling a student who had academic problems when I arrived, but she soon called me into her spacious and modern office. For the rest of the morning and through a "catered" Danish lunch, she described the programs, answered my questions, introduced me to faculty and students, and gave me a tour of the facilities.

The school was originally founded by Ingeborg Suhr, whose cookbook became the Bible of most Danish kitchens. (I have a copy in my American kitchen, too.) The facilities have been extensively remodeled and the director's apartment has been converted into a teacher's lounge and director's offices. The school is located in a major market area and very near the central shopping area of Copenhagen. The original focus, to prepare homemakers in cooking skills, was continued until recent years when, with government help, this focus was broadened.

Students were taking "semester" exams the day I was there. Each exam was about six hours long so faculty ignored their better judgment and permitted students to eat snacks—and they did! The exam that day was in consumer economics, and students were busy at work with electronic hand calculators provided by the school. They were working out budgets.

I met several teachers who had studied in the United States, one having been at Michigan State during my time there as an undergraduate. Hanne Sondergaard had been in New York City for several weeks recently as the Danish representative to a United Nations meeting on the roles of women.

I was impressed by several aspects of the program. The facilities and management were very good. The programs seemed quite rigorous and easily comparable to our teacher education programs. The subject matter of the program was rapidly broadening from the narrow focus on food preparation during the days of Miss Suhr. And students are students all over the world!

THE DANISH MINISTRY OF EDUCATION

The offices of the Ministry are most interesting because of their location and history. They are located along a canal and right across from Parliament. Before the Ministry of Education moved into the buildings, they had been the stables for Parliamentary horses. And, in fact, some of the animals which belong to a riding school using the grounds of Parliament still maintain residence. This makes life interesting in the Ministry on hot summer days, I was told. But the former residents did leave behind an interesting style of architecture for the human bureaucracy, and visitors, to enjoy.

In my conversation with Edith Kjaersgaard I learned that many of the controversies surrounding home economics in the United States and the legislation that affects it were also of concern in Denmark. And the same political and economic problems were prevalent. It appeared to me that other countries in Europe and Africa looked to Denmark and the other Scandinavian countries as having the broadest, most up-to-date programs in home economics. Fru Kjaersgaard mentioned she would like to come to a meeting of the American Home Economics Association because she believed that to be a meeting at which she could learn.

You can see from Fru Kjaersgaard's article that at present home economics subjects are taught in five settings. These are: (1) in the primary schools as a compulsory subject at the point when children are entering the teen years; (2) in the Youth Schools as elective leisure-time activities for teen-agers; (3) in the traditional Home Economics Schools as vocational preparation for institution management for students over 16; (4) in the "evenskol" program for adults; and (5) in the new home economics training course, which concentrates on the preparation of home economics teachers.

At the end of our meeting we expressed wishes to meet again, perhaps in the U.S. She had plans to attend the meeting of the International Federation of Home Economics in Canada in summer 1976 (and did attend, but was able to travel only in Canada).

THE DANISH GOVERNMENT HOME ECONOMICS COUNCIL

Fru Kjaersgaard represents the Ministry of Education on the Danish Government Home Economics Council. As described in a recent DGHEC brochure, the Council is ". . . within the province of the Ministry of Commerce, and its object is to further *nutritional, hygienic, economic* and *technical* matters in the household with a view to the interests of Danish homes and the community in general" (p. 3).

Experiments and research projects are conducted in the Council's own laboratories or elsewhere and the information is disseminated to the public. The Council also develops policy statements ". . . in matters of principle within the working scope of the institution." Research is conducted in the areas of household equipment, food and nutrition, textiles, laundry and detergents.

A notion of the scope of the Council's work can be obtained by looking at the annual research summary prepared ". . . for our foreign connections." Some titles listed for 1974 were:

Quality Evaluation of Frozen Filets of Fish
Canned Ready-Made Meals
Examination of Fitted Kitchen Furniture Units
Juice Extractors
Automatic Dishwashing Machines
Toilet Soaps
Bread
Durability of Polytetraflourethylene Coatings of Saucepans and Frying Pans

GRADUATE EDUCATION IN HOME ECONOMICS

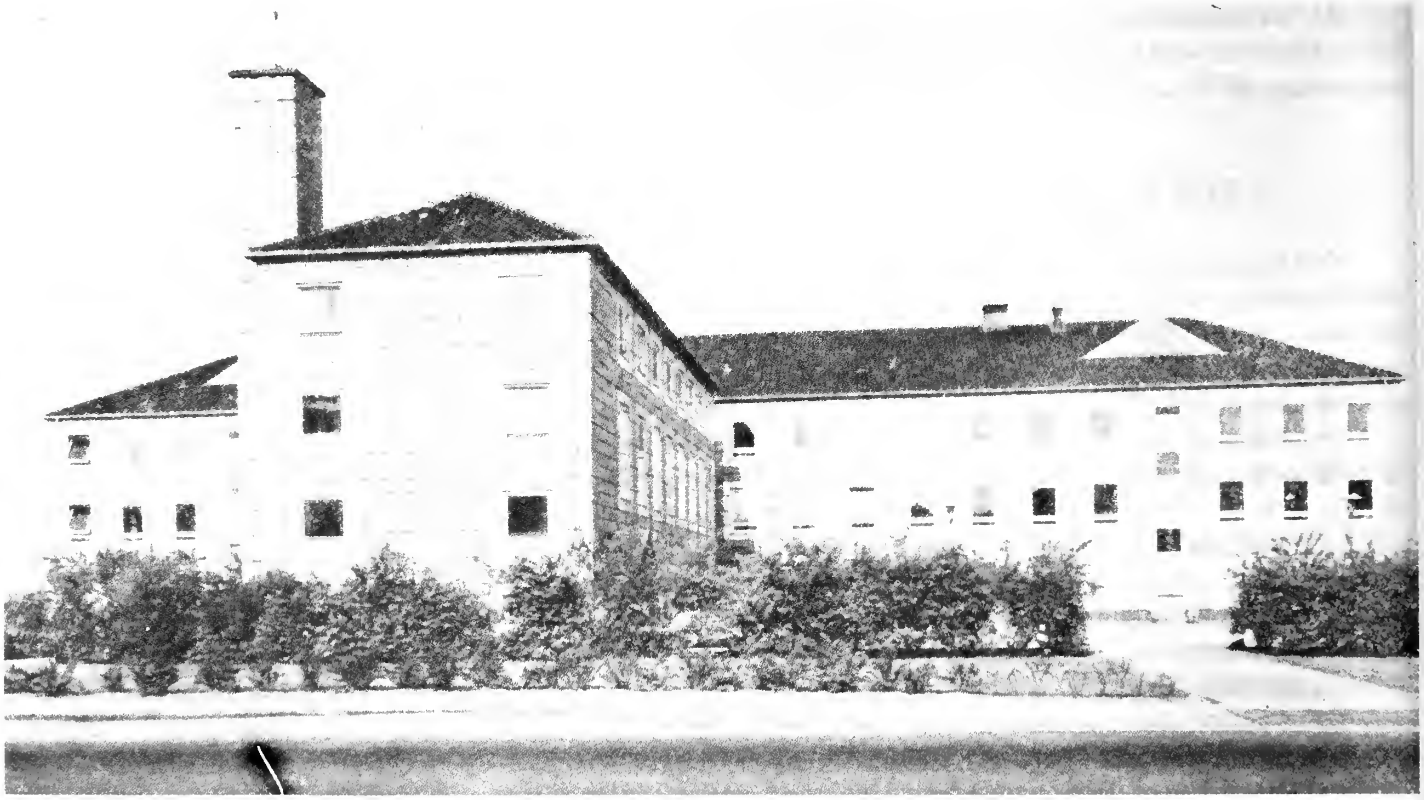
Graduate level programs in home economics are shared among the Scandinavian countries. These are comparable to our Master's degrees. At the University of Aarhus in Denmark, the area of specialization is consumer economics and management. One goes to Norway or Sweden if one is interested in foods or clothing. Dr. Ellen Margarethe Hansen, Inspector of Home Economics Special Courses at the University of Aarhus is a Danish home economist with a doctoral degree which she obtained from a United States university. She is an officer of the International Federation of Home Economics.

POSSIBLE FUTURES FOR INTERNATIONAL HOME ECONOMICS

I learned much about the philosophy of home economics from my visits with Hanne Sondergaard and Edith Kjaersgaard. I now better understand how "my field" fits into the matrix of Danish society. There are unique needs in the lives of Danes that home economics is striving to meet; some of these needs are similar to those of families and individuals in the

United States and some are different. An example of something a bit different is the large Youth School program established in 1969. This has met the needs of teen-agers who often live in rather small homes and apartments and who have no place to go in the evenings to be with their peers. Another example of a difference is the emphasis in the Danish Government Home Economics Council on topics related to dairy products and pork because these are major agricultural products of the country, and on topics related to the home's physical characteristics because this, too, is a major emphasis of the Danish society and economy.

I see home economics in Denmark as very progressive and quickly responsive to people's needs. I see Dansk home economics leaders as leaders in international home economics. And I hope that more home economists from America and all over the world will take opportunities to visit the home economists of Denmark. Fru Kjaersgaard and I have already made plans to visit the Home Economics Council facilities and Aarhus University. I just need to set the date.



The buildings of the Danish Government Home Economics Council, Copenhagen.

Suhr's Home Economics School in downtown Copenhagen.

Students at work in a family economics course — Suhr's.

HOME ECONOMICS IN DENMARK

Edith Kjaersgaard
Inspector for Home Economics Education
Danish Ministry of Education

Education in Denmark in the year 1976 is the second largest area of public administration. It must be admitted, however, that much education in Denmark also occurs in private households as well as in industry. The teaching of home economics constitutes a small part of the Danish education system as a whole.

As in most other countries, teaching and training have traditionally aimed to prepare students for vocational competence. The question is now whether or not the form and content of future training should be concerned exclusively with people's 'on-the-job' existence or whether more attention should be paid to other aspects of the human condition—such as working together with and for the family in one's own domestic area. In the teaching of home economics, this condition of dependence on factors in the home has long since been recognized and certain characteristics of our home economics programs have been drawn from this recognition.

THE PRESENT SITUATION

Home economics is taught in the Primary and Lower Secondary Schools for boys and girls as a compulsory subject. An Act of Parliament updating the requirements for education at this level (pupils are 7 through 15 years old) went into effect in August of 1976. The home economics program seeks to provide knowledge and experience in areas that can help boys and girls alike become better consumers and managers of homes. The home economics instruction usually falls within the sixth and seventh school years (forms) when children are 12 and 13 years old, with two, and then three lessons each week. Extra home economics courses can be arranged earlier or later within the nine years of compulsory schooling when local conditions favor this. There is the opportunity for students to attend a tenth year at this level under the new Parliamentary Act.

During the past ten years, the so-called Youth Schools, established by Parliament in 1969, have proved extremely popular with the 14 to 18 year old group, especially in the area of home economics. About 50 percent of all youths attend one or several courses, and one-third of this group enroll in home economics courses which are given titles such as "Modern Housekeeping." Therefore, extra classes in home economics are chosen as part of leisure time activities to supplement the compulsory program. The aim of these courses is to develop and stimulate the pupils' interest in the subject, increase their knowledge and skill, and teach them where to get additional information on relevant topics.

Home Economics Schools, which are usually residential boarding schools, are described by an Act of Parliament of 1970. They are intended for those pupils over 16 and offer five- to ten-month courses in home planning and management as general education and/or professional vocational training for personnel making food for large institutions. Recent years have witnessed a trend toward greater emphasis on the competence-based courses. Home Economics Schools are classified under the so-called 'Free School' category. This means they are usually privately owned institutions exercising the right to set their own aims, objectives,

and ideas, albeit within the framework of the law requiring education of this type to be general and with regard to home and family. The training courses follow curricula designed to prepare pupils for management of large institutional areas, such as residential schools and colleges, nursing homes, and workshop canteens.

The Structure and Content of Home Economics Teacher Training

1st and 2nd semester

Chemistry	Foodstuffs
Biology	Diet evaluation and planning
Microbiology and foodstuffs hygiene	Dietary ethics
Biochemistry	Cooking
Nutrition	

3rd semester	**4th semester**
Consumer studies	Paedagogics
Budgeting	Psychology
Sociology and national economy	Methodology
Sociology and social psychology	Applied paedagogics

5th semester	**6th semester**
Chemistry	Individual project work and teaching practice
Home furnishing	
Physics with implement and machinery studies	**7th semester**
Labor-saving	Paedagogics
Ergonomy	Methodology
Family counselling	Applied paedagogics

Other Learning Activities

Statistics	Vocational guidance and counselling
Data computing	Danish, written and oral
Study technique	Cultural orientation
First Aid	
AV-teaching techniques	

Leisure time instruction for adults today is extremely popular. The program has traditionally offered courses in housekeeping, but is now concentrating increasingly on aspects of nutrition and foodstuffs, consumer economy, and cooking.

In 1974, a revised 3½-year home economics training course was initiated which combined the teaching of nutrition, housekeeping, and consumer-related subjects (see chart above). This program has not yet demonstrated its popularity in the form of large numbers of applicants—150 at present. The motive of the program is to rally to the demands of the "housekeeping cause," and to meet the desire for less traditional goals, better teaching methods, and new entrance criteria. The required entrance qualifications for applicants are the same as those required by universities and other institutions of higher learning. In the new type of training curriculum, students' efforts are divided somewhat equally between practical laboratory work and lecture attendance at the training institute. The various subjects are scheduled in coordination with each other so that they can be studied concurrently. Traditional subjects retain their value while new and untried subjects are tested and placed in relation to their function and value in home economics. The result has been a home economics training program which enables the students to study:

- nutrition and foodstuffs in the widest possible sense, both in theory and practice
- consumer, family economy, and community problems in relation to family and housekeeping needs
- home furnishings, laundry, and housework in relation to the environment, available resources, the economy, and rationalization both at the home and the institutional level
- pedagogical and psychological subjects relating to nutrition, housekeeping, and consumer problems of people in special situations, singly or in groups, healthy or sick, young or old.

In addition, students have one semester for an individual pedagogic project of their own choice on one of the related subjects.*

Home economists are working as educators in different schools for children, youth, and adults. They also work as advisors to institutions and organizations as home economists in general, nutrition, and consumer subjects.

*EDITOR'S NOTE: This is similar to the student teaching experience in home economics education in the United States.

HOPES FOR THE FUTURE

The developments that have taken place within the last decade in the educational field in Denmark have mainly benefited children and young people. We are witnessing a lively debate on new forms for infant classes, for the compulsory primary education, and for the further education of the 16-19 year old group. This has unfortunately consolidated and increased the generation gap in which women especially feel outdistanced. Lifelong education remains an open question and research in this field is still very sparse. If new groups are reckoned with, then obviously part of basic education must be to enable people to discover and acknowledge their need for current enlightenment. People must be helped to change their attitudes about who can and should take new initiatives and about who can and should do the practical work in the home. Otherwise there will be a consolidation of 'left-out' women.

Adults of today have been brought up to regard idleness as unhealthy and honest work as the only useful virtue. Yet, we are witnessing how widespread unemployment is brutally confronting many innocent people with their own, and perhaps other people's, negative opinion of idleness. Could it be that we are beginning to realize that work and position as major objectives in life are by no means foregone conclusions? Attitudes toward an active leisure which affords cooperation with groups other than one's professionally or vocationally related ones will surely undergo basic changes in the near future.

We seem to be heading towards increased leisure time. It has been alleged that fewer jobs will result in fewer people seeking an education, since education without a vocational goal is senseless. Conversely, more time could well be spent in learning about family affairs, nutrition, community services, greater mutual respect and sympathy, landscape and environmental preservation, sports and keeping fit, and art and culture.

The much-belittled teaching of these subjects and the lack of insight into their value have contributed to the present tendency to ignore the educational needs of the under-privileged, of senior citizens, and of broken families; to sneer at the opposition of young people to the 'rat race'; and to ignore the insecurity of children. It would be desirable if more weight could be given to learning to get more out of life instead of only to learning the kind of work one should do. From my vantage point, it seems that family and home economics could play a more decisive role for teaching decision-making and consumer education. The content of home economics is the most relevant and, at the present time, professionals in the field are well equipped to solve many of the still unsolved educational problems connected with leisure and the family.

The new home economics teacher training program with special focus on homemaking as the value norm prepares home economics teachers for teaching, counseling, and helping to improve family solidarity. It better prepares home economists for teaching nutrition, management of family income to meet requirements, division of time between household tasks and leisure time interests, increased cooperation among family members, and respect for good, time-honored traditions.

A large modern classroom in the remodeled facilities at Suhr's.

Left: The home economics library at Suhr's which includes titles in several languages.

Below: A laboratory for courses in quantity food preparation — Suhr's.

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Thank you very much!
The Editor

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A publication of the Division of Home Economics Education,
Department of Vocational and Technical Education,
College of Education, University of Illinois,
Urbana, Illinois 61801

Volume XX, No. 5, May/June 1977. Published five times each academic year. Subscriptions $7.50 per year, $21 for three years; Canada, $8.50 per year, $24 for three years; Foreign, $10 per year, $27 for three years. Single copies $1.75. Special $5 per year ($7 foreign) for undergraduate and graduate students when ordered by teacher educator on forms available from ILLINOIS TEACHER office.

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Foreword

This issue of ILLINOIS TEACHER has been written entirely by male home economists (though admittedly one had a female co-author!).

The aim of the Assistant Editor, Roy Lawson, who dreamed up the idea and did the work to make this issue possible, was not to accent the contributions males are making so much as to show that they are involved, the same as females though in smaller numbers, in all areas and levels of the field and the profession.

After twenty years of ILLINOIS TEACHER we offer this issue as a landmark, a symbol of male participation, and we look forward to future participation of both sexes together. Let no female home economist fear a male takeover at ILLINOIS TEACHER or elsewhere!

Each page or each article may offer another surprise, although some of our contributors are so well known that they need no introduction. Their viewpoints vary and all speak for themselves.

As for every issue of ILLINOIS TEACHER, we hope this one will stimulate thinking, provide information, help solve some problems, and spur you to greater creativity. Your comments are invited.

—The Editor

"MEN, THE FUTURE, AND HOME ECONOMICS"
MALE HOME ECONOMISTS REACT

During the planning stages of this issue, we sent letters to several male home economists in the United States and two foreign countries, asking for their reactions to our theme, Men, the Future, and Home Economics. The response was gratifying and we are pleased to share their viewpoints with you.

C. E. Kennedy
"... must have both male and female high school home economics teachers."

Dr. Kennedy is professor of Family and Child Development at Kansas State University, Manhattan, Kansas. For fifteen years, he combined his teaching duties with administrative responsibilities as assistant director of the University Student Counseling Center. Since 1970 he has devoted full time to graduate teaching and research in adult development and family life education. He is the author of more than 30 articles and monographs. A textbook he is preparing in adult development and aging will be published by MacMillan Company in 1977.

Most of today's male home economists have entered at the graduate level. We need men throughout the range of the profession. Therefore, I would like to use this opportunity to urge the creation of scholarships that will encourage male high school seniors to choose careers in home economics education. High school teachers are our most significant recruiters.

Home economics is the one profession that has family as its central focus. To give leadership to the study and service of families the profession must have a proportionate representation of men and women in its membership.

As individuals move through the family life cycle they are faced with new tasks, new roles and challenges requiring new skills and understandings. It is imperative that, at the transition periods of family life, they have opportunity to participate in family life education. A meaningful consideration of such topics as beginning parenthood, the empty nest, care of older parents, second careers must involve participation of both husband and wife. For family life education to be psychologically accessible to men, there must be men among the leadership of such home economics programs.

Even more crucial, a foundation appreciation of the science of consumer education and homemaking must begin in the public school years. High school home economics classes need to be as available to young men as to young women. For added perspective and role model effect we must have both male and female high school home economics teachers. Many courses that need to be taught within the philosophical context of home economics, building on a family life foundation, are, rather, being taught in departments of business, sociology, psychology, physical education, and biology. Often this is because of the administrator's sex-role stereotyping of home economics into an altogether too narrow and antiquated domain. Male home economics teachers are needed to help challenge that practice.

There is also an extensive and rapidly developing range of human service occupations that are best taught as home economics-related occupations. These include for example, foster parents, house parents in group care homes, home/health aides, child care workers, activity therapists for nursing homes. Because of sex-role stereotyping of our profession, however, the home economics components—such as family economics, home management, design, family relationships, life span development, nutrition—are often ignored and the training is done by other professions.

Home economics can be one of the most strategically significant of all professions. During this period of social change, it is necessary that each community have one individual or agency with the responsibility to serve the catalytic and integrative function of bringing representatives of various groups in the community together to maintain a continuing study of the community's services to families. As members of the profession with primary expertise in family, home economists should be the persons giving this leadership in community development. We need both men and women for this important task!

Mr. Bob Butts is Assistant Professor of Home Economics at Eastern Illinois University, Charleston, Illinois. His teaching field is Family Life Education, and earned his graduate degree in home economics from Virginia Polytechnic Institute and State University.

Bob Butts

"... home economics has its hand on the heartbeat ..."

Only recently someone asked, "What is a male doing teaching home economics?" In a way I was surprised. It was the first time in quite a while that someone has asked that question. I like to believe that the times are "a changing" and folks are getting used to the idea that one's job is not determined by one's gender.

My initial experience with home economics fits the general stereotype. When I was in high school in the late 1940's and early 1950's, boys took "shop" and the girls took Home Economics. That was the way life was intended and we accepted it. It was our observations from the smell of freshly cooked brownies, the uniformed aprons the girls wore and the style shows in which they paraded their sewing skills, that cooking and sewing were the primary if not the only things one learned in home economics. It is not surprising that those who still hold that limiting view wonder why more men are entering the field.

When I became interested in family life education after having served some twelve years as a parish and campus minister, I started looking for a graduate program that filled my needs. I looked first at schools of sociology and psychology but I kept coming back to home economics programs. It seemed to me that they were approaching human development and family life specifically in a much more practical, pragmatic, functional perspective than the other disciplines, and this is what I wanted from a graduate program.

Doing graduate work in the college of home economics certainly changed my image of the field. I discovered first that home economics has competencies in areas other than just stitching and stewing—that in fact home economics has its hand on the heartbeat of what's happening in the world in terms of human and material forces affecting all of us.

Needless to say, I found it exciting to be a part of that kind of practical and human concern.

A second discovery I made was that there were males in home economics—both in the role of teachers and as students. It may be that having male teachers helped attract male students. I don't know which came first—that's not important. The important thing is that at least in some schools and departments of home economics the invisible but real signs that used to read "no trespassing—women only" have been removed.

My hope for the future is that sex labeling of jobs and professions and job segregation on the basis of sex will be a thing of the past in the fields traditionally belonging to women as well as fields that have been traditionally dominated by men. Home economics can be a precursor for that kind of future and be an example to others of how it can work.

I have never believed that changing old ways is easy, either on a personal or a societal level. I know there are potential tensions and problems related to men in home economics, but I also believe that as with any change there is also the potential for creativity and growth.

One home economics department I know about used to have in its entrance way a bronze plaque portraying a woman holding a child. "Where is the male?" some of us asked. Does he not have a place in the family—in home economics? Many of us both male and female believe that he does. We believe that men should have a larger share in the various aspects of family life. We are aware that he has had too small a share in the upbringing of the children. We know that the ability to show affection and to establish contact with children has not been encouraged in the man. We would like to see it encouraged. We have evidence that children need good contacts with adults of both sexes. We believe that men in home economics can be not only advocates for the expanding roles of men and women in our society, but also be models for constructive change.

Gerald Ramsey
"... men can enter the many fields of Home Economics and be successful, ..."

Mr. Gerald Ramsey has been Director of Food Service at Southern Methodist University since 1950. He has a Bachelor of Science degree in Foods and Nutrition from Texas Technological College at Lubbock and has done graduate work at the University of Chicago.

I'll have to admit my appearance at the Home Economics Department at Texas Tech University, Lubbock, Texas in 1936 was a little more than "they were ready for" but even in those days I was treated with respect and as professional as any other student.

In those days the curriculum was not as flexible as it is now so I had to make some changes to keep from taking sewing and other then required courses. But, it all worked out satisfactorily.

After graduation I went into Institution Food Service (College Feeding) and I have remained thirty years.

My view is that men can enter the many fields of Home Economics and be successful, the same as a woman can go into a so-called "man's field" of, for instance, engineering and animal husbandry (if that's what it is still called). One's professional achievement depends on one's personality, adaptability, professional attitude and conduct as well as integrity in whatever field s/he chooses.

I think the fact that some schools of higher learning have not re-named the Home Economics Department probably has kept many men out of the field.

Food Service is a fascinating field and more high school students should be informed as to the many varied fields Food Service has to offer, and its advantages and disadvantages as a profession.

Howard C. Busching
"... shake up the female home economics image."

Dr. Howard C. Busching is Associate Professor of Child Development and Family Life, School of Home Economics at Montana State University. His doctoral degree was earned from Columbia University in Marriage and Family Life Education and Counseling. He is a Fellow of the American Association of Marriage and Family Counselors, and has taught at San Jose State University and the City University of New York.

In my judgment, the role of boys and men in home economics in the future will depend mainly on three social factors. It is necessary to say "social." Of course, individual factors of personality and character are operating in any life situation, and these may counteract social factors or forces, but individual factors are almost impossible to generalize about.

One of the social factors will be the trend, already evident in the present, in regard to the attention paid to the "human role" as distinquished from "sex role." Today a major emphasis in the human development field is described by such terms as self-actualization, realization of human potential, and human relations training. These central concepts stress being human, or becoming human, rather than being male or female. This trend is one I hope and expect will continue. I have not infrequently had college students tell me that they like home economics "because it is more human than psychology or sociology." If home economics, in the future, goes along with this increased focus on humanness, or, even better, positively supports or leads that trend, then more men and boys will go into home economics. That trend shakes up sex stereotypes and sex roles, and also will shake up the female home economics image.

Secondly, there is the social factor of prejuduce and discrimination against males. This writer is aware of charges of discrimination against males in the profession of nursing, a traditionally female field. Home Economics is heavily female in numbers, and in power structure. Is there discrimination in Home Economics against men and boys, in employment, recruiting of students, administration of departments, professional organizations, and themes and illustrations in the literature? If our profession is sexist, then we have one very solid reason for the small numbers of men and boys in Home Economics. But if sexism is courageously looked at and abolished, in the future, then we can expect that more males will join us.

The third crucial factor is one within our profession, within us, that will not be attacked by the civil rights movement or affirmative action committees. Will we take strong initiatives to become a profession and a field that is exciting to males? To this question, there is danger that many will repeat those over-used retorts: "They are welcome!" and "Look how many

more males we have than we used to!" To my mind that won't cut it. It will take more than polite and pretty female welcomes to attract many males into home economics. We may even now be losing the race with other social sciences, particularly sociology, psychology, and health sciences, to get a hold and to keep a hold on the growing fields of human development (not just child development), human relations, human ecology, and marriage and family relations. If Home Economics clutches fast to its name, with almost paranoia, holds fast to its female image even while deploring it, and continues its skills orientation even while conducting endless evaluations aimed at revitalization—if this happens in the future, then we shall not be a very exciting science. We shall not gain males, and we are likely to lose females.

Arthur C. Avery
"Men look for new horizons, . . ."

Dr. Avery is Professor of Restaurant, Hotel and Institutional Management at Purdue University. He teaches food purchasing, equipment selection and utilization, food facility planning, and management and organization. In the past he has directed the research program in these areas. He reports that his classes are about 50 per cent male and have increased about three times in size in the last eight years.

As more men come to grips with the problems of home economics because of the need to substitute for working wives and mothers, it is only natural that more men expand on this interest by researching and teaching.

Organizing the business aspects of running the family is but a short step from running a store or some type of service company. If the man of the house gets pleasure explaining a budget, house or car financing, or the family investments to his wife, he could get pleasure in doing this to a room full of students.

Similarly, with shorter work weeks and more time on their hands, more and more men are becoming interested in what were formerly women's pursuits—sewing, crocheting, needlepoint, tatting and hooking rugs to mention a few. Roosevelt Grier, the mammoth former football player makes no secret of his needlepoint activities. Thus, more men are becoming interested in textiles, fabrication, styles and accessories. No longer does it detract from one's manliness to engage in these activities.

Food and nutrition has long had a good representation of men and the number seems to be increasing as men interested in food science take the nutrition road. This has new areas to explore and many of the old and new problems to solve. Some like the therapeutics and the feeling of restoring health through diets and contacts with patients.

Institutional management, for many years, has attracted both men and women who have enjoyed the service aspects of feeding youngsters and hospital patients without the financial pressure of commercial foodservice. Now some of these programs are leading toward commercial positions and linkage with hotel management and tourism. These have broadened the horizons and many men are flocking into these courses to be prepared in fields where the action is.

Some men feel lost in the vast commercial kitchens and have found that they are more comfortable in working on home equipment and furnishings. There is much research to be done and results can be satisfying. Some men like the thrill of advising women on how to do things in the home and they can be very effective as many women like to have men as leaders.

Men have always had a major share of research, teaching and consultation in child development and family organization. As the fast pace of modern living has increased the tensions and problems of the family, more men have become interested and are moving in to explore this intriguing field.

Men look for new horizons to explore, new dragons to slay and new experiences to feel. Home economics is losing its cut-and-dried aspects and is taking on the appearance of a fast moving, developing field and men are rushing in to be in on the ground floor. Of course, most look at the research aspects first. If that is not for them, maybe they can teach it. Finally, if they establish themselves as researchers, teachers or extension specialists, they are called in as experts and consultants to write about what they know and to solve problems, overcome roadblocks and propose new actions. This is where the ultimate in personal satisfaction comes and we men want it.

William H. Marshall

"... inherent and invidious sexism, and sexists, discarded."

Dr. William H. Marshall is Professor of Family Studies, School of Family Resources and Consumer Sciences, University of Wisconsin at Madison. His professional responsibilities are primarily graduate education and research.

"Men, the Future, and Home Economics" is a most interesting topic. In my twenty years of professional experience in home economics, I have seen little evidence that either the profession or home economics in higher education is becoming more co-sexual. In spite of considerable effort to attract men into home economics programs, there has been little if any significant change over the past 10 to 15 years in the percentage of men receiving any of the degrees granted by home economics programs. For several reasons, I see no reason to believe that the situation is going to change in the foreseeable future.

I am under the impression that campus affirmative action programs generally have as a goal the hiring of more women for faculty positions, on a total campus basis, so that a significantly increasing number of women will become part of the regular full-time faculty. However, the underlying goal of affirmative action programs is to remove sex as a basis upon which decisions about hiring are made. Therefore, hiring practices, along with all academic and indeed professional activities, are supposed to be not co-sexual, but asexual or non-sexual. A more appropriate term is probably gender free. I object to the word co-sexual on the basis of the fact that it continues to emphasize that the *people* who are working together are of different sexes, and this difference is constantly brought to bear on relationships and decision making. In my opinion, home economics has long emphasized rather than de-emphasized male-female differences, when it could have been forcing focus on persons and people in their human roles that transcend mere gender identity.

In an earlier published statement on this subject (see *JHE*, September, 1973), I wrote that one of the most serious issues affecting the future of home economics was the traditionalistic view of male-female relationships that permeates the profession and home economics curricula especially in higher education. Those people responsible for the destiny of home economics, especially administrators and professors, are themselves by and large highly traditionalistic in their view of male-female relationships. Though there are notable exceptions, home economics curricula are brought to life in the classroom from a traditionalistic feminist, rather than a human, viewpoint. This situation amounts to a kind of hidden curriculum, which men, especially in undergraduate programs, instantly perceive. The long standing inability of the field to deal with this hidden curriculum is, in my opinion, the major reason why undergraduate majors in home economics remain essentially unattractive to self-respecting men. There is little likelihood that any significant changes are going to take place in the number of men enrolled in undergraduate programs in home economics until a sweeping examination is made of home economics curricula at all levels, and inherent and invidious sexism, and sexists, discarded.

I have in my files a recent document which was sent from a committee which is part of one of the most important organizations in home economics. In the section listing the reasons for developing the plan which the document is about, the very first one is "It is not just for women, but also for men." This statement falls right out of air and has nothing to do with the import of the program being described in the document. Further on, two case studies are given about persons who have participated in the program the document describes. Both are women, but that is not the issue. One of these women is described in glowing terms as having benefitted by being able to take her husband and children with her while she went to summer school away from her home campus. Obviously, under affirmative action regulations, all programs are for women as well as men. Why do home economists continue to emphasize such a point? And taking one's husband and children along for a summer's study may well indicate an inability of the developing professional *person* to undertake professional and scholarly roles, as distinct from familial roles.

I think there is a future for people, but considering some of these most basic problems which home economics is unable and/or unwilling to solve, I am a bit gloomy about the future of home economics.

Dr. Robert Hillestad is an Associate Professor in the Department of Textiles, Clothing and Design; College of Home Economics; University of Nebraska-Lincoln. He teaches courses in basic design, fashion illustration, fashion design, and the socio-psychological aspects of clothing. He has conducted a number of fashion study-tours in Europe and New York City.

He is National Vice-President of Omicron Nu, home economics honor society; past Vice-President of the Nebraska Home Economics Association; and former Technical Consultant for the *Journal of Home Economics*.

Robert Hillestad

"Bringing about a more balanced mix. . . ."

The field of home economics is based on the philosophy of meeting the needs of individuals and families. As such, the philosophy does not imply that activities related to it should be carried out by one gender or the other. However, the role of the home economist has been played predominantly by women since the time of formal inception of the profession in 1909. Up until recently, home economics was one of the few professions in which women could comfortably participate. The unique knowledge and expertise related to the home which women have brought to professional involvement has influenced their professional activities.

Their early efforts were directed toward skills in carrying out home activities. Later, their concerns shifted to concepts related to home life. During the past several years the scope of home economists has widened even more; they have recognized that the quality of life in the United States as well as in other countries is being threatened in a variety of ways. As a result they have been challenged collectively with implementing strategies for strengthening it. In the process of identifying problems and proposing solutions it has become apparent within the profession that the mission of home economics is a monumental one requiring diverse talents of both men and women.

In the past few years growing numbers of males have recognized home economics as a field which could utilize a variety of talents; yet, the proportion of males to females in the profession is still relatively low. Some factors which no doubt discourage males from entering the profession are: 1) the difficulty which the general public has in perceiving a male in the role of Home Economist; 2) the lack of emphasis on attracting males to college and university home economics programs by recruitment teams; 3) the emphasis on the relationship of content in the various home economics subject matter areas to the traditional female role; and 4) the lack of perception among leaders in business, industry and education of the potential contributions males with backgrounds in home economics subject matter areas can make.

Although the field of home economics will no doubt continue to be filled predominantly by women during the next few years the prospects for more involvement by men appears to be good. Bringing about a more balanced mix is the responsibility of several interest groups. Administrators of units of home economics need to work toward establishing programs which clearly attract persons regardless of gender to the mission of the field. Educators at various levels and in various subject matter areas of home economics need to plan meaningful learning experiences in which men as well as women can comfortably participate. Leaders seeking personnel trained in home economics need to focus on qualifications which relate to responsibilities rather than on factors related to gender. Men who are already in the field of home economics need to set standards, assume leadership, and provide visibility for other men who are interested professionally in meeting the needs of individuals and families.

Since 1949, Dr. James E. Montgomery has been involved in teaching and research in home economics, largely in the areas of housing and gerontology. During these 28 years he has been a department head for 12 years. Opportunities have permitted him to write numerous articles, research bulletins, chapters, and to present many lectures and addresses.

Currently he is Head of the Department of Housing, Furnishings, and Home Management, and Chairman, Faculty of Gerontology, University of Georgia, Athens.

James E. Montgomery

". . . teaching more 'co-sexual' courses."

Since 1776 the American family, the central concern of home economics, has encountered and survived wars, depressions, racial strife, poverty, mobility, epidemics, and mechanical and electronic revolutions. It now treads the deep and uncertain waters of present and future shock. Current problems and stresses include unbelievable societal complexities, spiraling divorce rates, unwanted pregnancies, peer group authoritarianism, sex role changes, a growing segregation of the generations, increased participation of women in the labor force, an array of consumer and environmental issues, electronic taste makers, and a growing dependency of the family on outside-of-the-home institutions and agencies.

In order to attempt to be relevant in the face of such profound and unsettling change, home economics has attempted to alter its own course. It must strive even harder in the future. At the risk of over-generalizing, one might say that in the past the family and home economics were largely micro-phenonena. That is to say, the family was, not completely but largely, a self-sustaining and self-maintaining social unit. In earlier days it was largely responsible for providing its own food, clothing and shelter and for socializing children. Home economics set about assisting families with these tasks and roles. But in recent decades the family has become very much dependent upon macro-environmental forces—fast foods, off-the-rack clothes, speculatively built houses, K-12 schools, countless agencies and programs, commercial entertainment, and the working of women in industry, government and commerce. An attempt to be a positive force in family concerns and affairs has led home economics to broaden its turf, to view the family in a larger societal context.

I recall the priest in "How Green Was My Valley" saying that anything that came between his parishioners and God was his business. In a sense it seems that home economists are trying hard to observe the dictum that anything that comes between them and the family is their business. Understandably, no profession is ever completely effective. Surely all of those who labor in the area of home economics share a common desire to become even more relevant and current. Over a period of three decades not only has home economics widened its concerns to include a greater recognition of its responsibility to view the family in a larger and more complex setting, but it has also invited a few men to participate in its mission. One doubts, however, that more than one percent of all persons in the area are male. And the majority of these are usually found in larger universities in the areas of child development, family relations, foods and nutrition. Those of us in land-grant institutions might erroneously conclude that home economics is "co-sexual." But such is hardly the case.

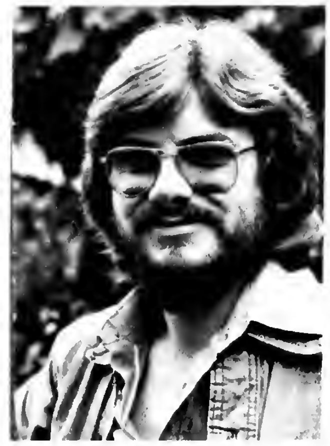
Depending upon one's perception, one might lament that home economics should be "manned" by more men. Perhaps there is not any aspect of the field that can be handled better by a man than by a woman or *vice versa,* but the presence of men just might call attention to the fact that needs and potentials of the family involve both sexes. It may sound trite, but if men and women are to work as equals at the operating table, the drawing board, in court, and at the conference table, is it not even more logical that they should work side by side in areas involving the family? While there are few, if any, sex-linked roles in commerce, industry or government, there are many basic ones in the family.

To me a far more critical issue than men in home economics is that of teaching more "co-sexual" courses. My judgment is that because of the heavy hand of tradition the content of many of our courses is feminine in nature! In courses concerned with clothing, home furnishing, kitchen lay-outs, food preparation, and even child rearing, are males and females really given equal time? My guess is that our unwitting feminine approach to many courses has little drawing power for male undergraduates. On the other hand, courses in human sexuality often play to a full house of men and women. Perhaps therein lies a lesson in what might be achieved in other courses. As sex roles generally are becoming blurred and over-lapping, one could speculate that with a little effort a wider range of courses in home economics might develop meaning for men as well as women.

Another issue that home economists must face is that of becoming more involved in research. Not only must more research be undertaken in such areas of the field as textiles, clothing, housing, and consumer issues, but also it needs to become as relevant to men as to women. Yet regardless of the sex of our research we must try even harder to replace myths with facts and scientific principles.

Home economics is very much alive, is vigorous, is changing to meet changing needs. And one doubts that it faces any more problems or uncertainties than most other areas of specialization. If, in the future, it takes greater cognizance of the opportunity to proceed in terms of maleness as well as femaleness and if it assumes greater responsibility for research, it increasingly will become a truly significant "caring" agency for the family of man, woman and children.

Noel Gough is a Senior Lecturer in Curriculum and Teaching, and Coordinator of Home Economics Teacher Education at the Rusden State College, Victoria, Australia. His present research interests include theoretic and practical approaches to curriculum development with particular reference to "interdisciplinary" studies such as environmental studies and home economics.



Noel P. Gough

". . . need to liberate the male. . . ."

During the past decade we have heard much about such questions as women's liberation, and female sex-role stereotyping, and home economists have been urged to play their part in freeing the housewife (and women in general) from the results of such stereotyping.

I believe there is at least an equal need to liberate the male from the consequences of similar stereotyping. For example, the man who feels impelled to conform to the stereotype that males are naturally polygamous and sexually predatory is as unliberated as the woman who believes that her sex is naturally monogamous and passive. Similarly unliberated is the man who believes that playing chef at a barbecue is acceptable as a man's job, but that preparing the main domestic meal for his family is a woman's work.

Male home economists could contribute significantly to the liberalization of male sex-roles, even if only by the encouragement of certain attitudes within the family and society, e.g., that children should be seen as an equal responsibility of the father; that the male parent, too, should willingly accept restraints on his freedom and public participation for the few years required to look after young children; and that household responsibilities should be seen as the duty of *all* who eat, and wash, and clothe themselves. Male home economists might also provide an alternative role model for other males, insofar as such men would publicly be seen as being professionally concerned with those matters of domestic consumption and management which previously have been stereotyped as female interests.

If we are to utilize human resources most effectively, many more women ought to be breadwinners, and many more men ought to be househusbands. If househusbands are to become more common—and I believe they will—male (and, of course, female) home economists will contribute significantly to society's recognition of the vital role in national and domestic productivity which such househusbands will play.

Counteracting existing stereotypes is only one useful function of the male home economist. The different cultural biases and interests of males which have, indeed, resulted from such stereotyping, may also be a welcome new resource for the profession. Rather than deploring the cultural conditioning of the past which has meant that, for example, men are more likely than women to be interested in microelectronics, home economists should be prepared to encourage and use the new developments in the field which could results from the bisociation of "men's interests" and aspects of everyday home and family living, whilst continuing, however, to discourage in future generations the tendency for the diversity of human occupations and interests to become categorized by sex.

Dr. David M. Fulcomer is the Director, School of Family Studies and Consumer Sciences at San Diego State University. His association with home economics commenced in 1950 with the Iowa State University, where he spent twelve years as Professor of Family Sociology and Marriage Counselor. During his career he has taught at many colleges, schools and departments of home economics.

David M. Fulcomer

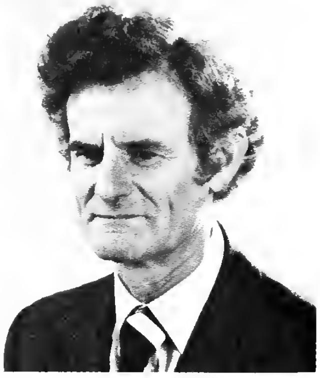
". . . impatient with this slow progress. . . ."

As our society moves toward equality between females and males, I see, and welcome, an increasing number of males in home economics.

For all too long, females have been given a secondary role in the professions. Progress toward their equal place is much too slow; and as one who for thirty-seven years has had the *privilege* of professional associations with many females in home economics, I am extremely impatient with this slow progress.

As females are liberated, males will be liberated. This includes the gradual disappearance of home economics as a female profession into one which is a profession, without regard to sex. It will be a long time coming; but the sooner it comes the better.

The basic goals of home economics are the health of individuals, families and society. These goals allow no room for sex discrimination.



Roger Irving

"... unrealized potentials for men in Home Economics."

Dr. Irving trained as a chemist in Australia and England. He has worked in industry and has held University teaching positions in Australia, England and the U.S.A. (Pennsylvania State University Chemistry Department). His chair in Home Economics, which was created three years ago, is the only one in the U.K. Dr. Irving's research interests include energy conservation and sensory perception and he says these subjects are so absorbing that they have left little time for his former interest, thermochemistry of complex inorganic compounds—a field in which he has published over 50 papers.

In Britain, Home Economics as a University course does not have the long history it has in the U.S.A. In fact the first students in Home Economics were admitted to the University of Surrey in 1970.

The degree was conceived as an interdisciplinary course providing a liberal education in the physical and social sciences which focus on the home, the family and the community in such a way that the student had an adequate preparation for a career in industry, commerce or social work. The syllabus was devised in conjunction with the Heads of the appropriate departments, engineering, biochemistry, sociology, etc., and right from the start the teaching on the course was almost equally divided between the sexes. In the first year students take introductory courses in physics, chemistry, sociology, psychology and biology which lead in the second year to survey techniques, food science and nutrition, building and home planning, and domestic engineering. In the final year emphasis is placed on the human environment and the sociology, psychology and economics of the consumer.

Such a course should have obvious attractions to male undergraduates who wanted a broad yet rigorous education in arts/science. To date all of our students are female, and this causes us some concern lest it be regarded as a "women only" course. One expects a preponderance of women in the foreseeable future but men as well as women should be interested in domestic technology, the design and function of domestic appliances, the conservation of energy, the effect of advertising.

The reason for the lack of men in the course could well arise from conditioning in the schools where Home Economics is often erroneously seen as "cooking" and as such not a "manly" subject for study at University. It is quite clear that the male lecturers who teach in the course, and they are enthusiastic about its educational merits, certainly do not see it as a "women only" course. At the undergraduate level one can say that there are tremendous and, as yet, unrealized potentials for men in Home Economics.

Postgraduate research is slowly gathering momentum. The research portfolio at Surrey includes energy conservation in the home, comfort and safety in the home, and consumer attitudes.

Broad, interdisciplinary subjects such as these, where the postgraduate student would be jointly supervised by, say, a physical scientist and a behavioural scientist probably represent the most favourable point of entry of male students into the profession.

As well as Home Economics graduates, engineers or human biologists could well carry out research on, say, comfort criteria in the home, and we hope to attract such graduates in the near future.

My summary of the situation in Britain is that there are tremendous opportunities for men in Home Economics, that this will probably start at the postgraduate level and then work down to undergraduates, and that the job prospects are as good as for arts or science graduates.

The holding of the First International Congress of Home Economics, the creation of the Federation and the establishment of headquarters in Fribourg, Switzerland in September 1908, preceded the birth of the American Home Economics Association by about three months.

The founder and first President, Monsieur Georges Python and two other Swiss men served in the presidential role for forty-six years, and gave leadership to eight of the eleven congresses held to date. During this period, these men obtained valuable financial support from the Canton of Fribourg.

TIGERS AMONGST THE ROSES:

An Historical Review of Home Economics for Secondary School Boys in the United States

by
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In a period when deep-reaching changes are challenging the very nature of a profession established for over half a century, it is vital that those in the profession can account for the *status quo*. There is a need to investigate congruence between home economics education and the professional aims of home economics over time, the breaking down of sex-role stereotypes in American society, the impact of anti-discrimination legislation, and the necessity for home economists to know and understand the past performance of their profession. While the inclusion of males in home education is but one facet of the mission of home economics, it is nonetheless a topical and critical concern.

The purpose of this historical review is to investigate the participation of boys in high school home economics programs in the United States during this century. From this review, several generalizations* concerning the nature and circumstances of the participation of boys in home economics are formulated and some implications for the future discussed.

Degree of Male Participation

Although exchange classes in shop and home economics were reported as early as 1907, the only certainty about the frequency of home economics work for boys in the period up until the 1930's, was that classes were scattered and that much of the learning was taught incidentally in other subjects. Van Liew (1936) recalled the first boys' class she taught at the Oregon Agricultural College in 1908, believing it to be one of the first, if not the first, offered in the country. Later random accounts of boys' home economics classes include Fisher's (1922) description of a one-semester course for twenty boys, and Johnson's (1926) proud announcement of a flourishing "bachelor's club" in a high school setting.

Classes for boys were established in Twin Falls, Idaho in 1922, and by 1924-5 more intensive courses were reported to have commenced in Denver, Los Angeles, Detroit and Tulsa (Virginia, 1950). Tulsa had the distinction of first making a year's course in home economics a requirement for senior boys, and by 1925 enrollment had reached 251 students. By the late 1920's, the teaching of boys was no longer a novel undertaking; in almost every state teachers were teaching boys as well as girls, and most programs had been in operation a few years (Rhyan, 1928). A United States Office of Education survey showed home economics to be so popular in 1930 that it was taught to over 7,000 boys in 42 states (Nowlin, 1937, p. 290).

The 1930's provided a period of unprecedented growth and interest in boys' home economics at the high school level. From 1918 to 1936, the number of home economics classes for boys increased from 323 to 5,587 (U.S. Dept. of Interior, 1949, p. 18). Orednick (1934) suggested that the acceptance of boys into home economics classes was "passing from the experimental stage into one of regular curriculum planning" (p. 157). Members of the "Committee on Home Economics for Boys," set up by the American Home Economics Association in 1936, sent questionnaires to state home economics supervisors, and made more extensive surveys in New York State and Colorado. Responses showed 200 home economics classes specifically for boys and a total enrollment of boys, in all home economics programs, of 6,000 (Straub, 1938, p. 557).

With a view to answering pertinent questions concerning home economics programs in high schools the Home Economics Education Service of the United States Office of Education (USOE) surveyed the nation's public schools in 1938-9. The data collected showed that home economics was widely available to high school pupils at that time. The enrollment of boys in home economics in the 10,197 responding schools was 28,889 or about one percent of all the boys registered. The largest proportion of boys was found in twelfth grade (USOE, 1941, pp. 1-5).

*For this purpose, the definition developed by the American Home Economics Association in the publication, *Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development* (AHEA, Washington, 1967) is used. "Generalizations express an underlying truth, having an element of universality, and usually indicating relationships" (p. 23).

In the Spring of 1940, the Home Economics Education Service completed a follow-up on the survey completed one year earlier. Replies were received from 12,340 senior high schools, 9,888 of which offered home economics. It was learned that 17,324 of the 329,264 boys in the 1940 graduating classes had had some instruction in home economics. Approximately 50 percent of these boys had only one semester; the other 50 percent had completed two semesters of home economics (USOE, 1941, p. 44). However, the reliability of these data should be treated with some apprehension. Virginia (1950) attempted to determine the number of boys enrolled in high school home economics courses from 1935 to 1945. Her attempts to get accurate data were frustrated by the fact that some states had no figures available, some had incomplete records, while others did not have the sexes categorized separately.

Coon's (1962) comprehensive national study of home economics in the public schools in 1959, showed that more than one percent of all the boys, or an estimated 63,075, were enrolled in secondary school home economics programs. The largest proportions were in the twelfth grade with 3 percent, and the seventh grade with slightly more than 2 percent. Almost 2 percent of the boys were enrolled in the eighth grade, and less than 1 percent in the ninth, tenth and eleventh grades (p. 35). The 1959 enrollment figure was a considerable improvement over the 26,490 boys registered in homemaking programs in 1954 (Anthony, 1954, p. 327).

Data for fiscal year 1972 showed a significant reduction over the decade of the percentage of students—both male and female—enrolled in homemaking programs at high school level. Within the fourteen Office of Education instructional titles, no course enrolled more than 26 percent boys (family relations) or less than 2 percent boys (clothing and textiles). In vocational home economics, boys accounted for 25 percent of the enrollment in food management, production and services, and 5 percent of clothing management, production and services enrollment. In 1972, 39,024 boys comprised 14 percent of the total enrollment of 280,263 in vocational home economics programs at high school level (Division of Voc. and Tech. Ed., 1973, p. 14). According to one recent estimate (*Forecast for Home Economics Research*, 1976), boys represented 15 percent of the **total** number of students aged 13-18 years enrolled in home economics programs in the United States in 1975-76. Although small, both percentagewise and in absolute terms (1,264,000), the degree of participation by boys is at an all-time high and showing a positive trend.

Rationale for Offering Boys' Classes

The potential of home economics education for enhancing the quality of family life has been the most consistent rationale for offering courses to boys. Most reports were founded on the belief that a subject dealing so vitally with life, the home, and home problems should at least be available to both sexes. This belief was formally stated as early as 1922 (Fisher) and affirmed soon after by Livingston (1925), who felt it ". . . only fair that the other half of the human family should profit by much of the information which is given with much care and efficiency to women and girls" (p. 434). While the ultimate objective of all homemaking education was to be the establishment of happy, satisfactory homes, some educators had definite viewpoints as to the division of roles in the home:

> In food preparation not much instruction should be given to boys, and certainly no considerable degree of ability should be sought . . . besides, the preparation of food in the home should be regarded as the duty of the housewife (Starrak, 1930, p. 453).

It seems the original intentions of some home economics classes for boys were often shortlived as students came to recognize their own needs. A "bachelor's club" at Alabama College Training School was made up of boys who in the beginning expressed a desire to "learn how to cook candy, cakes and biscuits," but soon wanted to know about cuts of meat, how much measuring spoons cost, what a high school boy should eat, table manners and introductions (Spafford, 1939). Mack (1933) was able to justify boys' courses as a necessary response to the "many and drastic" changes in the social and economic phases of home life in this depression period. She believed men were more interested in home economics offerings than ever before; they realized they needed knowledge and were asking for help.

The boys' classes of the 1930's were the beginnings of the notion that homemaking in the broader sense was a joint responsibility of men and women. Pritchard's (1938) major emphasis was to try to help boys see themselves as contributing home members at that time, rather than as potential homemakers. This limited partnership basis of homemaking was also stressed by Nowlin (1937) and Hussey and Pickens (1934); homemaking could be more suc-

cessful when each member knew something of the other member's task. Better cooperation and more sympathetic understanding was possible when both were "properly trained."

The family living emphasis of boys' courses continued through the 1950's. Johnson's (1949) plea for the inclusion of more boys was a response to the changing social roles within the family, and of men and women generally. Home economics classes gave boys a chance to assume these changing roles; there was relevance for boys in clothing selection, etiquette, and the basic functions of cooking and mending clothes. The boys' course at Nyack High School, New York, was regarded as th first step towards an ultimate goal of a co-educational class on marriage and family living (Hilbert, 1952). This course was intended to do more than merely breaking boys "into helping with family chores." Further incentives followed the launching of "Sputnik"; the argument being that the nation needed strong homes to complement technological advances, and homemaking education was only reaching a small proportion of the secondary school population (Ray, 1958).

Scharmer (1940) stated that boys needed home economics training and development even more than girls, because, besides needing it for a successful home life, they also needed it for earning a living. Although the Smith-Hughes Act had made available funds for vocational education in 1917, it was not until the Vocational Education Act of 1963 and subsequent amendments to it in 1968 that boys were deliberately included in high school vocational home economics courses recipient of federal funds. Prior to this, many of the home economics related skills were taught under specific occupational titles (Langworthy, 1913) and only in broader interpretation could be regarded as home economics.

Anderson (1937) has described a vocational training program for boys where the home economics related skills offered included commercial baking and meat marketing. The purpose of Stackhouse's (1937) boys' class was to provide a proving ground to help boys locate their chosen vocations. So successful were some general classes, that the vocational aspect "came naturally." "A boy from a cooking class in the Arsenal Technical Schools is making 'pin money' by baking graham cracker pies after school and on Saturdays" *(Practical Home Economics*, 10 (8) 1932, p. 249).

The vocational home economics class at James Fenimore Cooper Junior High School (New York) was more comprehensive. Established in 1943, the course was still operating in 1955 (Englander, 1955). The entire curriculum was aimed at giving boys a feeling of confidence in meeting situations in the world outside of Harlem. The "Foods Shop" program stressed both subject matter and social living and was aimed at giving boys an opportunity to work together on a functional project, to prepare food for public consumption, and to participate in social experiences involving students and teachers directly in the community.

Popular reasons for offering boys' classes included responses to the increasing participation of women in the workforce, the need to develop social skills, and simply a need to include boys as desirable participants in home economics programs. Many "bachelors' clubs" grew largely from requests from the boys themselves who apparently wanted to learn basic manipulative skills (Johnson, 1926). When asked what they expected to get out of a home economics class, De Kalb, Illinois, high school boys (McDougall, 1934) said:

> . . . they wanted to cook, their reasons varying from being able to help mother, getting a job as an assistant cook at a camp, a desire to eat, learning something interesting to do in leisure time, and being able to teach a possible wife. Others need nutritional knowledge, social behavior guidelines, menu planning (p. 325).

Quick (1974) believed that boys were attracted to home economics because they "love to eat," and accordingly were considered "naturals in the foods laboratory." She was further convinced that the boys' "general directedness" added another dimension to family living classes. Anthony (1956) was also of the conviction that boys "add spice to the homemaking class—boys give directedness and objectiveness to a program with their matter-of-fact approach to family living" (p. 330).

The miscellany of other rationales included helping boys to solve their social relations problems, and as a "potential family head, become the focus for more and better nutrition education" (Moore, 1970). Anthony (1956) reasoned that if more and more women were working outside of the home to supplement family income, then men were obligated to share more home responsibilities. Rhyan (1930) had foreshadowed this as a key role for boys' home economics, and by 1965 Dunhoff was able to affirm the rationale in a much more receptive climate as the rate of female participation in the work force steadily increased.

Analysis of Content of Boys' Classes

Teachers of the pioneering courses for boys were concerned with the nature of course content for several reasons. One salient factor in the 1920's was that the types of courses offered would normally not carry college entrance credit. Another consideration was that teachers felt boys would hesitate to elect a course which would be incongruent with their masculine images. This concern with effeminacy led many teachers to look past the traditional involvement of boys in cookery to more integrated work, and it also helps explain why courses for boys exclusively have persisted until the present time.

In one course offered to twenty high school boys for a single semester, the traditional home economics content was interpreted in terms of male interests, although it did cover a spectrum of home economics subject matter (Fisher, 1922). The major components of this course were; food (values and body needs), textiles and clothing (clothing choice), budgets (spending and saving), emergencies (first aid, home care of sick), etiquette (duties of a host), and cookery (camp and home). Fisher stressed that the class members were active, athletic and members of school teams, ostensibly verifying the maintenance of a masculine image.

In the early 1930's, a junior high school course for boys was commenced in Denver under the title of "Problems in Everyday Living." The basic units of the courses were, "The Boy, His Family and His Friends," "Food Facts for the Individual," "Earning, Saving, and Spending," and "Clothing for Boys." A unit course on etiquette in a Michigan school proved very popular as a boys' home economics class. The essential points considered in this course included seating guests, removing wraps, introducing people, dancing between courses, appropriate dress for various occasions, and table etiquette (*Practical Home Economics*, 10 (8), 1932).

Selection of appropriate content for boys had become a fairly widespread concern by the mid-1930's. One objective of a special committee set up by the American Home Economics Association to investigate boys' courses was to determine a curriculum suitable for boys. The committee set down certain parameters for the direction of subject-matter (Straub, 1936);

> The specific objectives under these units are not so different from those for girls, but a difference is made in emphasis, except in home and family problems where there should be unification of point of view rather than emphasis on interest (p. 540).

To overcome any connotation of the course as "sissy," Pelphrey (1937) called her class "Social Arts for Boys." The content of the course was arrived at by polling male students, other teachers, parents, and people in a range of occupations. The following phases were included in the initial courses: (1) the boy and his human relations; (2) food in relation to the boy and his needs; (3) the home of the boy and its surroundings; (4) clothing in relation to the boy and his needs; (5) first aid, and (6) the choosing of a vocation. A subsequent evaluation of these courses showed that boys wanted more laboratory work, especially on units in foods.

A major problem in this period was that of textbooks. Home economics texts for girls, let alone texts for boys, had only been available for a short period of time. Several publications did become available in the mid-1930's. Nowlin (1937) was quick to use a new home economics text, N. A. Talbot *et al.*, *Practical Problems in Home Life for Boys and Girls* (American Book Company, New York, 1936). A "Boys' Social Problems" class (*Practical Home Economics*, 15 (8), 1937) was based on the Lyster and Hudnall text, *Social Problems of the High School Boy* (Steck and Company, Austin, 1935). When the Burnham, Jones and Redford text, *The Boy and His Daily Living* (J. B. Lippincott, Philadelphia, 1936), appeared on the market, it gave teachers a source of confidence and was immediately grasped as a basis for many boys' courses.

Spafford (1938) reported that many of the boys' courses of the mid-1930's typically began with units on food preparation and nutrition and subsequently dealt with personal grooming and clothing, social conduct and etiquette. Frequently, these studies led to a study of boy-girl, and adolescent-parent relationships, a boys' place in the home, and money management. Non-laboratory co-educational courses became more commonplace and dealt with topics such as family relationships, personality, good manners, use of leisure time, health, food in relation to health, clothing and personal appearance, the home and community, and vocations. Spafford insightfully observed that:

> Many teachers seem to overweigh the boys' interest in food study, and food preparation is given to the exclusion of other important aspects in which there is or would be a real interest if offered (p. 28).

The exchange class for juniors and seniors at a Missouri high school (Nickerson, 1939) began with a unit on personal and social relationships, followed by units dealing with food and

nutrition, clothing care and selection, money management and home planning. In Nickerson's sewing class for boys, a necktie was the first project, followed by a butcher's apron of unbleached calico complete with embroidered name, and a chef's hat.

A "Future Bachelors" course in the early 1950's began with what the teacher thought to be the boys' greatest interest—eating (Hilbert, 1952). Nutrition was approached from the standpoint of athletes' needs, and while learning to cook various foods, boys studied the characteristics of each, their place in the diet and selection in the marketplace. On the other hand Arnold's (1954) "Senior Homemaking" course was elected by boys who were not being "bribed by prospects of endless cooking and eating activities." One section of this one-year program dealt with the psychological, social and economic phases of home living, while the other section emphasized a physiological approach. However, basic cooking seemed to be the popular drawing card for an elective course in Trumburg, New York (Doig, 1956); ". . . boys are always interested in cooking . . . and we allow them to choose what they want to make. This leads naturally to the use and care of cooking equipment" (p. 78).

Purgraski (1963) believed that her restaurant management course could be kept "definitely masculine" by having an outline that stressed work efficiency, work organization, scientific food preparation and principles and techniques connected with the total foods field. All course content had a strong vocational emphasis. Boys not only studied work opportunities, but spent a considerable amount of time operating a restaurant within the school.

More recently offered courses aiming to include boys have tended to stress *avocational* content. Boys in a pioneer class in Greenville, Pennsylvania were to study the "basics for future living" (Moyer, 1968). If college bound, they were prepared to mend a seam, make a snack, wash and iron their clothes, and earn extra money by babysitting. Other facets of the course included etiquette and clothing fashions. Similar content was reported in a one-semester "Bachelor Know-How" course, offered by Niedenthal (1969).

In an "exchange" class reported by Radford (1971) boys learned the necessity of cleanliness in the kitchen, carving meat, cleaning an oven, measuring correctly, organizing a kitchen for efficient use, methods in mixing ingredients, and setting a table. The so-called manipulative skills practiced by the boys were manifested as brownies, pizza and a roast beef dinner. Adams' (1971) "Preparation for Bachelorhood" course included basic cooking techniques, foreign foods, special meals for holidays or parties, and outdoor cooking.

Chesko (1972) offered a more comprehensive course. Boys studied the mechanics and operation of sewing machines and were expected to be competent in about twenty clothing repair techniques. In foods, the emphasis was less on eating than learning more about nutrition and consumer buying. The cooking program included safety, quick easy meals, patio cooking, the use of freeze-dried foods (for camping and back-packing), preparation of food on hotplates, electric skillets and popcorn makers. In other reported programs the content was not so ambitious, as an example from the Fallen Timbers Middle School in Ohio bears witness (Pusey, 1972):

> After bacon and eggs came cookies, pizza, popcorn with punch and a favorite fudge. They [the boys] liked the choice of food. Bacon and eggs seemed to be a favorite among boys and they enjoyed preparing them. In doing so, they learned to use both the range burners and oven. They had to plan and coordinate the food preparation, and with it all we discussed some nutrition (p. 20).

Organizational Variations

Organizational variations in home economics classes for boys have been the product of a recognized need to accommodate boys in what has been a traditionally female environment. Throughout the century, teachers seeking male students have expressed a continuing concern that the atmosphere created in the home economics classroom should be conducive to the encouragement and maintenance of male enrollment. Organization has been, and still is, a primary problem in offering home economics to boys, as evidenced by the frequent attention given to the problem in home economics literature. In her national survey of 1965, Wells found that classes in home economics were offered in many areas of study, organized as exchange classes, mixed classes, or boys exclusively.

The "exchange system," where female home economics students exchanged with the boys in shop classes for a determined period of time has been one of the most popular organizational forms. The high school course "Problems in Everyday Living," was a required junior level course in the Denver Public Schools in 1931. The course was exchanged with boys' vocational subjects on some occasions for a 2-3 week block, and at other times for two days per week for a

semester (McClure, 1931). In the Warwick Public Schools (New York) the homemaking and industrial arts departments exchanged seventh grade students for five weeks each year (Radder and Baker, 1933).

Geddes (1944) described an organizational structure designed to facilitate the co-educational study of home living in the seventh grade. The classes rotated between the shop and the homemaking department, dividing their time evenly between the work. In the eighth grade, *boys alone* were taught personality and shop work, while the girls were taught simple shop work, personality development and sewing. Similar exchanges continue to be popular (particularly at junior high level) to the present time (Marovich, 1968). Courses such as that at South-West High School (St. Louis), where woodworking technology and foods and nutrition classes exchange for two weeks each semester, continue to be a popular, but limited, means of involving boys in home economics work.

Classes exclusively for boys were recorded as being offered from as early as 1908. During the 1920's interest expanded past the traditional classes in camp cookery, and boys were involved in a wider range of subject matter. The formation of boys' clubs often solved the problem of including boys in the formal home economics program. The "Boys' Patch Club" at Fairmont Junior High School in Cleveland in 1929 was probably typical of many across the nation at this time (*Practical Home Economics*, 7 (1), 1929). Van Liew (1936) reported a number of boys' clubs in New York State, noting that "this is a plan used by many school administrators to assure themselves of the stability of demand" (p. 144).

Limited numbers of boys have participated in special boys classes offered as part of the formal curriculum. Orednick (1934) described classes taught at the University of Minnesota High School and segregated on the basis of sex. In New York State schools, boys' classes in advanced foods were organized cooperatively with school cafeterias. The students got practical experience in cooking, serving food, serving at the counter, washing dishes and cleaning up the kitchen (Van Liew, 1936). A junior high course for boys at Cranston, Rhode Island, was first offered in 1934. The class met four times each week for 58-minute periods, with one class each week preceding the lunch period. Boys satisfactorily completing the course were given the opportunity to go into the regular foods course normally offered exclusively to girls (Cowles, 1938).

Purgraski (1963) drew attention to the commonly used strategy of attaching special names to boys' classes. She believed the selection of an appropriate course name was important for the sake of prestige, and in her "Restaurant Management" course she pursued a strategy of always referring to kitchens as laboratories, and relating food studies to vocations, so as to keep the course meaningful for boys.

Students in a Brooklyn high school were able to enroll in a one-semester pre-vocational course open to sixth, seventh, and eighth term boys interested in learning more about culinary arts. The "Boys' Foods" classes met five times each week for discussions, demonstrations and laboratory sessions on food and nutrition (Dunhoff, 1967). During the term students were required to do outside reading, visit the school cafeteria as a field trip and participate in community projects such as Red Cross or UNICEF.

Although no longer the novelty they once were, co-educational classes continue to account for relatively few of the boys included in all types of home economics programs. It was not until the 1930's that serious consideration was given to teaching boys and girls together. Kauffman (1930) stated that the methods in presenting co-educational courses were the same as with girls, but cautioned that ". . . the boys will be more alert than the girls, therefore she [the teacher] may have to prepare her lessons with more thought" (p. 140). Names such as "Euthenics" or "Homecraft" were recognized by Kauffman as having public relations value, but she did question the need for home economics to change its name simply to attract boys.

In 1936, an experiment in teaching mixed classes was "the outstanding achievement" of the home economics department of Central High School, Tulsa. For the previous ten years, instruction had been given in segregated groups (Firth, 1937). Pelphrey (1937) conducted an "experiment" to help determine whether homemaking should be taught to boys alone, or to boys and girls together, and to help determine what to include in such a course. Her tentative conclusion was that boys should be taught alone as they were less self-conscious when isolated from girls, and ". . . they do not try to hide their slowness to learn, poor writing and awkwardness with giggles, funny questions and teasing as in the case of mixed groups" (p. 471).

Co-educational classes were gaining some acceptance in the late 1930's. In the Winnetka (Illinois) Public Schools, students spent five weeks each in one of the following: art, artshop, science, shop, printing, and homemaking at the junior high level (Pritchard, 1938). An ad-

vanced course in vocational home economics offered to girls and boys of the junior and senior classes of the Higginsville High School (Missouri) aimed to utilize the mixed enrollment. One object of the course was to promote an interchange of ideas between boys and girls to help meet their common needs and solve some of the problems of home living and social relationships (Journey, 1939).

Teacher Expectations of Boys in Home Economics

Home economics teachers have always had a measure of trepidation about teaching boys. While in most other parts of the curriculum boys could be taught in the same environment and circumstances as girls, in home economics classes they became "different animals." Finucane (1929) believed many boys regarded home economics as an easy way of earning credit. She thought that few boys were interested in the relationship of food to health, and their desire to eat surpassed any other reason for wanting to learn cookery. She expressed some anxiety that boys were hard to interest for a whole year.

Virginia (1953) contended that in making a course in home living acceptable to boys of the virile type, methods and techniques would need to have masculine appeal, although some suggested activities could be applied to girls' classes. The difference was not so much in the method itself as in its presentation, and its adaptation to boys' situations. Boys would be more interested in a project if they undertook it as a group, as the activity was then put into the class of school sports. Ray (1958) suggested that by offering classes exclusively for boys, instruction could be given from the male viewpoint, thereby facilitating the maintenance of discipline. In the Menomonie (Wisconsin) public high schools, administrators had hesitated to set up a program for fear that boys enrolled in home economics might become discipline problems in the school (Harper and Russell, 1955). They capitulated on the understanding that the home economics subject matter was to be appropriate to young men entering a new and challenging area.

> . . . the fact that high school boys are always hungry is a strong incentive for them to learn to cook. Food preparation lessons, however, should be practical. Boys want to learn preparation of the type of food to fix when mother—or the wife in their future—is delayed at Ladies' Aid, or gets home late from work (p. 46).

Other commentators have also attributed to boys an obsession for eating. Tilden (1967) stated that not only did boys love to eat, but seldom were they on diets (ostensibly opening up all sorts of possibilities for cookery work)! Boys needed home economics work because they have had no association with food other than eating it. Perhaps there was some justification in spending most of the class time cooking (Doig, 1956), "All in all, the part of the course which the boys like best is cooking; they like to eat and are always hungry" (p. 205). Boys were frequently regarded as having more energy and enthusiasm than girls, and because of this, supposedly had the ability to accomplish more than girls in the same length of time (Mack, 1933). While they expended more of a teacher's energy than girls (because of their zealousness) they were considered more interesting to teach. Stackhouse (1937) advised that ". . . When a group of young men come into the home economics room with eyes all a-twinkle and the air of expectation written on their faces, the teacher feels an unmistakable challenge" (p. 352). Purgraski (1963) regarded the boys' home economics class as no place for a "weak or timid" teacher. The teacher would always need to be alert, and to carefully plan work adaptable to boys' special demands.

Boys in one 1930's class were regarded as being more accurate than girls in using recipes, attempted no guess work, were not hampered by poor work habits, and left the kitchen in good order (Radder and Baker, 1933). The general feeling of home economics teachers was that boys were noisier than the girls, intensely good natured, and on the whole did better work than girls. Nickerson's (1939) teaching strategy was based on the notion that boys loved to make things for their mothers; "Independent as they appear on the surface, inside they will always remain sentimental of the old rocking chair, the apron-string, or anything connected with mother" (p. 160).

Dunoff (1965) believed that in order to provide information and experiences that would prove valuable to male students, home economics teachers would need to find a new approach to presenting course material; boys would be more interested in mechanical aspects rather than aesthetic considerations. Ellis (1958) stated that boys were more "engineer-minded" and had a knack for finding shortcuts in meal preparation. "They use the freezer a great deal, and

show interest in other mechanical appliances too. The increased use of mechanical appliances in the kitchen has probably helped to spur this new interest" (p. 18). One favorable aspect of including boys was that they came to class without any preconceived notions of how to do things. Teachers could teach them the "right way" without having to undo other habits.

Other teachers have reported that boys give "directedness and objectiveness" to a home economics program. Because of their "matter of fact" approach to family living, boys could "add spice" to a homemaking class (Anthony, 1956). Boys were reputedly more concerned with the practical approach to decision making, and thereby added another dimension to a family living, psychology or consumer education class (Quick, 1974):

> Males have a way of reasoning that generally differs from feminine thinking, and the teacher must respect such differences. Directness of thought, impatience to complete a project and a strong competitive spirit could be assets in planning a boys' program (p. 40).

Generalizations and Suggested Future Implications

This historical review has enabled the formulation of a number of proposed generalizations concerning the degree, nature and circumstances of the participation of boys in home economics education, and the subsequent suggestion of some possible implications for the future. The generalizations should be interpreted in the light of the nature of the sources from which the literature was reviewed. The review has, by necessity, relied heavily on articles appearing in the *Journal of Home Economics*, *Forecast for Home Economics*, and *What's New in Home Economics*. Many of the source articles are typically anecdotal rather than objective, and tend to favor reporting successes, rather than failures in involving boys in home economics. Despite these limitations, the proposed generalizations can be considered a reasonable account of the participation of boys during this century.

The nature and degree of participation of males in home economics education has been largely determined by the prevailing social climate. Within the broader limitations of the culture, social mores and conventions establish a pattern of behavior for the majority approval of courses of action. The present social climate is probably more conducive than it has ever been to the approval of male participation in home economics. Males were rarely involved in home economics programs in the decade following the Lake Placid Conferences (1899-1909), but a more permissive environment in the 1920's culminated in a peak of interest in the mid-1930's. The situation was generally static until the late 1950's, and only recently have participation rates significantly begun to increase.

Male participation in home economics at the secondary level has been marginal and has shown relatively little improvement over time. Home economics has remained a predominantly female pursuit, and at best during the period in question, males have accounted for less than 10 percent of the enrollment. Greater proportions of males are registering in non-traditional courses such as "Consumer and Homemaking Education," but the more traditional course offerings continue to be overwhelmingly female in orientation and sex composition.

Home economics educators have continued to see the male role as novel, and have been unaware of the profession's previous attempts to include males. Exchange classes, novel subject names, specialized course content, and acquiescence to student demands have all been reported as viable strategies for encouraging males into home economics programs. However, each of these strategies was reported as early as the 1920's, and some were in vogue prior to this time. Exchange classes are still being reported with the same enthusiasm and assurances of success as they were in the 1930's. They are neither novel nor the most satisfactory means of seeking and maintaining male participation.

When offered to boys, high school home economics courses have been assigned different titles, structure and content from those offered to girls. To avoid using the title "Home Economics," teachers have devised a formidable array of alternate course titles. "Boys' Foods," "Applied Economics for Boys," "Chefs' Club," "Future Bachelors," and "Foods Shop" are but a few of those reported in the literature. Separate classes for boys have continued to be the most popular organizational form, as bachelor clubs and exchange classes bear witness. Likewise, much of the course content has been determined by teachers' assessments of what is appropriate for boys. Seldom has a common course for boys and girls together been reported in the literature.

Teachers of boys' home economics classes require a measure of stamina and special competencies. Home economics teachers have consistently expressed anxiety about teaching boys' classes. Many teachers have considered that boys take home economics only as an easy way of

earning credit, and others have reported doubts as to the sincerity of boys in wanting instruction in home economics. Boys have been regarded as boisterous, awkward and hyperactive. They may be difficult to interest for a whole year, but invariably they will love to eat. Presumably a survival conscious teacher will heed the warning.

The enhancement maintenance of "family life" has been the most common justification for including males in home economics programs. Early boys' classes such as "camp cookery" were typically single-purpose and functional in kind, but the emphasis shifted in the 1920's. As the body of home economics knowledge grew, an increasing commitment was made to teaching interpersonal relations, particularly within the context of family. As this type of content transcended the role-laden subject matter of other facets of home economics, co-educational classes were easily justified on the basis of the promotion of mutual understanding of family members' roles.

Home economics programs have continued to reinforce traditional sex-role stereotypes. Despite the increasing participation of males, home economics has remained female in orientation, ostensibly preparing women for the traditional role of housewife-homemaker. Males have not been included from any commitment to a long-term shift in the roles of either males or females. The rationale for too many of the boys' programs at secondary level has simply been to equip boys with basic competencies to help them through bachelorhood, and in later life to assist when the wife may be "indisposed."

The urgency of including males in all facets of home economics has not been apparent to home economics professionals. Home economics professionals have tended to see the participation of males as a "frill" rather than as something essential to the future growth and viability of the field. The establishment of boys' classes, or the inclusion of token males in regular programs seems to have satisfied most interpretations of male participation. The need for male high school home economics teachers has escaped attention, yet is possibly one of the most critical factors in establishing and sustaining male participation.

Home economics teachers have accepted the status quo, and have seemed little concerned with the need to change and innovate. Home econnomics teachers have been passive in the school situation; they have accepted both their subject content and traditional audience without any apparent questioning. They have not reached out as far as they might have to include males, and have been content to direct their subject towards females. They have been more apologetic about their subject rather than improving programs to fit changing social needs.

The essential implication for home economics education is that it must be set free from the bonds of sex-role stereotyping. Home economics subjects should be taught on the same basis as other subjects in the curriculum, and common content identified for both males and females. There is no good reason why home economics should not be taught on the same co-educational basis as history, English or mathematics. If home economics cannot respond to this demand, then its place in the curriculum is subject to serious question.

The demands of a more "co-sexual" home economics are pressing, and in the current social climate, the very survival of the field of endeavor may be at stake. Failure to meet the conditions of existing federal legislation will withdraw much of the financial lifeblood from home economics programs. Much work lies ahead if balanced programs are to be made available to students at the elementary, secondary and college levels. Many existing source materials and textbooks must be considered redundant if they reinforce the rigid sex-roles of previous generations. Males must immediately be attracted to the field, both as teachers and students. The lack of male teachers compounds the existing problem; male students are without satisfactory role models to guide them into a wider range of role and occupational choice.

Home economics teachers need to be aware of their profession's past performance in terms of subject content and audiences. Teachers need to recognize that the "exchange classes" and "bachelors' clubs," so often seen as the most expeditious strategies for coping with boys, are anachronisms and have no place in a true co-educational environment. The male role in home economics must be considered as normal, and home economics teachers are duty-bound to become champions of role flexibility. Failing this, other facets of the high school curriculum will further encroach on the domain of home economics; already many consumer education programs are carried on outside of the ambit of home economics, and health educators have become increasingly interested in nutrition education.

Home economics teachers will need to revise many of their present curriculum offerings, and attempt to deal with homemaking as it really is, rather than homemaking as it was. Many of the value laden programs of the past will need to be disposed of as the field comes to grips

with problems of the real world. If teachers themselves are convinced of the worth of their programs, then they can unashamedly offer home economics to all, without hiding behind special course names and appealing to appetites. The credibility of home economics may not be as strong as many in the profession would like to believe. In Baker's (1969) terms:

> I submit that as long as home economics remains predominantly an arena for female action and opinion it has no right to speak for the family and cannot develop and implement those programs needed to strengthen and improve family life (p. 371).

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In academic circles, Wilbur O Atwater, a chemistry professor at Wesleyan University, Middletown, was a friend of home economics Dr. A C. True, a chief of the Office of Experiment Stations in the 1920's was highly esteemed by Isabel Bevier as ". . the unfailing friend, the wise counsellor, and general benefactor of home economics The many studies and publications made under him have been an invaluable source of information and inspiration to countless teachers of home economics "*

Perhaps the greatest single contribution to home economics from a man was the work of Benjamin R Andrews. Forty years on the staff at Teachers' College, Columbia University, Andrews was successively secretary of the department of household arts, and professor of household economics He was prominent in the "euthenics" movement, a so-called science dealing with efficient living and the improvement of living conditions Chosen by the Lake Placid Conference Group, he became secretary of the committee formed to consider a national home economics association, thereby beginning a lifelong association with the AHEA Andrews was probably best known for his text, *Economics of the Household* (J B. Lippincott, Philadelphia, 1923; 1935), although he also wrote many magazine articles, bulletins, and sections of textbooks, and as home economics editor for the J B Lippincott Company, edited more than fifty textbooks

*Bevier, I *Home Economics in Education*. J. B Lippincott and Company, Philadelphia, 1928, p 48

TOWARDS HOME ECONOMICS FOR ALL
A CHECKLIST

by

Royston Lawson

What do you know about men in home economics? Circle A (Agree) or D (Disagree).

A D 1. In 1975, 15½% of high school teachers of home economics were males.

A D 2. A man was once President of the American Home Economics Association.

A D 3. The first classes for boys were in response to boys' demands.

A D 4. Male high school home economics teachers have most frequently taught family relations type courses.

A D 5. Benjamin Andrews was a leading home economics educator during the 1930's.

A D 6. Home economics teachers believe boys want to cook in home economics classes.

A D 7. There has never been a male high school teacher of clothing/textiles.

A D 8. Interest in home economics for boys is a phenomenon of the 1960's.

A D 9. Exchanging classes with "shop" is the most effective way of involving boys in home economics.

A D 10. Co-educational classes in home economics were forbidden by law until the 1964 Civil Rights Act.

A D 11. There is sound educational justification in requiring separate curricula for males and females in home economics.

A D 12. Research indicates that home economics educators resent the entry of men into their field.

A D 13. Home economics teachers risk becoming redundant if they offer courses to girls only.

A D 14. In college, males make up less than 4% of the enrollment at Bachelor's level in home economics.

A D 15. Home economics education is the most popular area of specialization for males in undergraduate home economics programs.

A D 16. Home economics teachers believe boys are more likely to participate when home economics is called something else.

A D 17. Participation of males in home economics classes will lead to "feminization."

A D 18. Title IX makes it compulsory to have males in home economics classes.

A D 19. Employment of more men as high school home economics teachers will do little to encourage male participation.

A D 20. Forming a Bachelor's Club is the ideal way of providing home economics education for boys.

ON BECOMING A HOME ECONOMICS TEACHER

William Watson
B.S.H.E.

Sex discrimination! What do you think of when you see the words "sex discrimination"? If you are like most of us, the words conjure up the vision of a female attempting to enter a normally male dominated field, encountering resistance from the people involved in that job or profession, and perhaps public or legal opposition to her entering this field. Well, in my case I expected to encounter reverse sex discrimination as I am a young man who has chosen a female dominated profession. As a graduate of Washington State University with a Bachelor of Science degree in Home Economics Education, I am academically prepared as a teacher, and will soon discover whether society will accept me as such. Why was I attracted to this field? I have often wondered myself!

I grew up in an extended family situation and spent a good deal of time in the kitchens of my relatives. I suppose I was an early gourmet. I do not know why, but I did feel that the kitchen was the center of the home and the room in which I was most comfortable. When I was twelve and my mother started working on the fruit harvest, it was much easier for me to do the cooking than it was for my younger sister and brothers, and I felt comfortable doing this since my father did much of the cooking at home. There was no resistance from my family; in fact, my sister was happy to have me do the cooking, and as my mother would clean up my kitchen mess, it worked out well for all of us.

Just for the record, I am also an Eagle Scout, and the recipient of the "God and Country" award. On scouting trips I usually did the cooking, menu planning and the shopping for my patrol, and sometimes for the troop. I suppose the highlight of my epicurean cooking experience as a scout was the "Camporee" when I was in ninth grade. I prepared turkey and dressing, mashed potatoes and gravy, fruit salad and apple pie. This was all cooked outdoors on a campfire. The turkey was wrapped in aluminum foil, and cooked all day in a pit similar to those used for luau cooking. I baked the apple pie over an open fire using a home made reflector oven made from aluminum foil. I prepared this meal for fifteen persons but by the time the word had circulated throughout the camp there were quite a few unexpected guests for dinner and no leftovers to worry about.

My first formal experience with home economics was as a junior at Wenatchee High School when I enrolled in the "Bachelor Living" class. I found this class so interesting that I decided to go on and take Advanced Home Economics. It was at this stage that I met my first roadblock—at this time there were girls in the boys' shop classes, but boys were not allowed in the girls' home economics classes. In my senior year, a new counselor agreed that if I could talk one of my teachers into accepting me as a student in Advanced Home Economics, then he would approve my enrollment in that class. I presented my case to one of the home economics teachers and got a favorable response. However, my schedule did not enable me to enroll in her section so I convinced my "Bachelor Living" teacher that I would not be a disruptive influence in her "Advanced Home Economics" class, and she accepted me as a student. This class proved to be the most beneficial of my high school experiences. The first semester was about child-rearing, and I had never been exposed to this subject before. I now feel it should be mandatory for all high school students. The other part of the course was advanced cooking and it was generally a lot of fun, although I did learn a lot more about nutrition.

During my school summers, from the time I was sixteen, I worked professionally as a cook in local restaurants, but my ambition to become a teacher never waned. Originally I wanted to be a history teacher, but when I was awarded "Best Thespian" and "Best Stagecraft" in my senior year, I thought drama would be a better field for me. Following high school graduation, I entered our local community college intending to major in speech/drama with a minor in history, and with the ultimate intention of becoming a teacher. At this time the teacher glut

was becoming apparent and I was loathe to continue preparation for a field with limited employment opportunities. I decided to quit college.

To satisfy my money needs, I again resorted to cooking in restaurants for the next three years, while I decided which line to pursue. The restaurant work became boring and dead-end, so I re-enrolled in the local community college, took general requirements and attempted to discover my major interest. I was considering, among other things going into hotel and restaurant management, but I still felt that this was not what I really wanted to do, so I kept looking further for other fields. I did not have the interest in chemistry needed to become a nutritionist, so I thought why not home economics education? The deciding factor in my ultimate decision was the FEAST (Food, Education and Service Training) program offered at the community college. I recognized that there was a great need for occupational training at the high school and community college levels, and not everybody has an academic orientation. I believed I could utilize my knowledge and skills and so make a meaningful contribution in this area.

My college advisor was a little surprised at my interest in this field, but was very helpful to me. Since I had finally decided on my career goals, I began to look around for a university with an established home economics education program, and finally setled on Washington State University. Dr. Alberta Hill, the Dean of the College of Home Economics at Pullman, was excited at the prospects of having a man enrolled in the program and offered me every encouragement. While attending Washington State, I encountered no discrimination in my classes—if anything, the faculty went out of their way to be helpful to me. Many of my classes had male students enrolled previously, and some instructors occasionally may have been apprehensive about having me in their classes. These fears were unfounded as I caused no problems and established a good rapport with both fellow students and faculty members.

While I was at Washington State University I was Treasurer of the Home Economics Association, a member of Omicron Nu home economics honorary society, Chairperson of the Home Economics Education Advisory Committee, and a member of the Dean's Advisory Committee.

I was a little concerned about doing my student teaching; there were no problems in the college atmosphere where people's attitudes tended to be more liberal, but I was uncertain whether high school teachers and students would accept me as a Home Economics Teacher. I worried needlessly. My cooperating teachers, Ms. Pat Buckley, and Ms. Diane Francis of Kamiakin High School (in Kennewick, Washington) were very helpful, and there were no negative reactions from either of them. Actually, I felt that being a male was helpful in some teaching situations, and the fact that many of the well-known chefs are men also helped my image in the foods classes. I also taught a coeducational family living class and introduced the students to specific areas such as single living and alternate life styles.

I was often singled out during my college days as I was the only known male home economics graduate from Washington State University, and as such was the subject of several articles in the local press. Both my family and my friends gave me tremendous support during the whole process of my searching for a professional career, and later when I had decided what my vocation would be, supporting me in every way they could.

Now I face the biggest challenge of all—finding a teaching position. Will other areas and people accept me as a qualified home economics teacher, or will they only see me as someone different? Most people have said they thought being a male in the field of home economics would be an advantage. I only hope they are right and that my gender is a help, not a hindrance. Only time will tell.

Herbert Bullard, a Navy veteran, commenced a four-year home economics education curriculum at Pepperdine College, Los Angeles in 1946.* Like many a Navy man, he had spent much of his idle time doing fine handwork while aboard a submarine tender in the South Pacific. Bullard experienced some difficulty when he first applied for his practice teaching, as the local high school would not accept a male, particularly in the clothing and textiles area. Following his graduation he had some twenty schools refuse to consider his application before being finally appointed a high school home economics teacher at San Bernadino Senior High School.

Another man became a home economics teacher in quite different circumstances at the Port Washington High School in New York in the early 1950's. The regular (female) teacher had been taken ill, and the class "soon found a young bachelor in their midst who answered their needs and was willing to accept the challenge."**

**What's New in Home Economics*, March 1950, pp. 126; 128.

**Columbia, A. G. "When a Man Teaches Home Economics." *What's New in Home Economics*, September 1953, p. 88.

ON BECOMING A HOME ECONOMICS TEACHER

Mr. Carl Savick is a Home Economics instructor at Harding Senior High School in St. Paul, Minnesota. He is active in both the Minnesota and American Home Economics Associations, a member of the St. Paul Home Economics Steering Committee, and a two-year member of the National Legislative Committee of the American Home Economics Association.

I was raised in a family operated restaurant in Kiester, Minnesota and graduated from the Lewis International Hotel School in Washington, D.C., in 1965. I then decided to attend college with plans for a career in food-service management. I took foods classes to supplement my business administration major, and soon discovered that home economics was the career for me. Maybe it was the humanitarian approach of home economics that excited me, but my major was soon switched from business.

In 1969, I was the first male graduate in home economics from the Mankato State University in Minnesota. I worked for several years in food-services, and at one stage was the operator of a restaurant in Bucelyn, Minnesota. During this time I realized that I cared about and could relate to young people, so I decided that teaching was the career for me. I returned to Mankato State University, and in 1972 graduated as the first male to receive a secondary general home economics teaching certificate from that university. My student teaching at Prior Lake, Minnesota was concerned with consumer education and consumer foods.

My teaching career began at Harding Senior High School (St. Paul, Minnesota) in 1972 where I taught consumer foods. In 1973, the school started a food-service program in occupational home economics which was subsequently expanded into a model restaurant where the students serve breakfast and lunch to the faculty each school day.

I was fortunate that I chose a non-traditional role in the exciting times of the liberation movements. Besides having a job, I have a job that I really enjoy. It's great how people can usually do what they wish to do. Being a male in a female dominated field has also had its advantages; it has opened many doors. There is a noticeable reaction in people finding out my occupation, and many are curious to know why I chose this vocation. I have gained acceptance from members of the home economics profession, teacher colleagues, the public and my students. My future plans are to teach other areas of home economics including consumer foods, consumer education, housing and family life.

Mr. Savick with some of his foodservice students at Harding Senior High School.

Attitudes of Acceptance Toward Males Entering the Home Economics Profession

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This study was an attempt to determine attitudes of home economists toward the acceptance of males into the field of home economics. The sample consisted of 270 male and female college administrators and faculty. The general hypothesis for this research was that (1) acceptance of individuals into a sex-typed profession will differ among higher and lower professionally committed individuals and (2) degree of acceptance will differ systematically with selected demographic variables. Instruments used were a personal data sheet, the Measure of Professional Commitment (Loftis, 1962) and a Sexist Attitude Inventory. As measured by this instrument, home economists were generally accepting of males entering the profession. The findings indicate that attitudes of acceptance toward males entering home economics are not associated with degree of professional commitment. Of the several indices of professional achievement used in this study, only one, office(s) held in professional organizations was significant suggesting that non-office holders demonstrate attitudes of acceptance to a greater degree than office holders. It was found that males demonstrate a greater acceptance of males entering the field than do females. Professional rank, salary, age and work experience do not appear to be associated with attitudes of acceptance toward males.

The assignment of distinct occupational roles to males and females has been documented in every human society. Generally speaking, males have been prescribed the responsibility of executive action and planning while the females have assumed roles of following and implementing established policy lines.

In our American society dichotomous sex roles have long been established not only in the home but in the occupational fields as well. However, there are indications that our society is moving toward less rigid definitions of sex roles. Pressures exerted by Title VII of the Civil Rights Act of 1964, public and private organizations, numerous individuals, and the 1972 Constitutional Amendment to Title VII have provided the impetus for change.

Although changes are to be found, some professions are still populated primarily by one sex. These professions are often referred to as sex-typed. Epstein (1) quoted Merton who wrote, "Occupations can be described as 'sex-typed' when there is an associated normative expectation that this is as it should be" (p. 152).

A distinct sexual division of labor can be found in every human society from the most primitive, to the most highly sophisticated. This division may be inherent in human nature or it may follow prescribed cultural norms. Roe (2) in a historical reference to the division of labor in societies stated,

> Every society distinguishes at the very least between men's and women's work. . . . These are the primary, minimal divisions, but in most societies division of labor is carried far beyond this. . . . However far division of labor is carried, these primary divisions remain. . . . There are few occupations which are completely limited to one sex, yet most of them have unequal proportions of men and women (p. 4).

The sex-typed barriers previously deterring males and females from pursuing and acquiring employment of their choice have been eroding. In an effort to examine the impact of eroding sex barriers upon professionals in a sex-typed field, this study was undertaken. The home economics profession was selected to represent a sex-typed field. According to recent data from the American Home Economics Association (3) females constitute approximately 99 percent of the membership of the home economics profession.

This research attempted to determine the prevailing attitudes of professionals which affect their acceptance of members of one sex into professions that are presumed to be the

This article is adapted from Bentivegna, A. M., *Attitudes of Home Economics College and University Professionals Toward Males Entering the Field.* Unpublished doctoral dissertation, The Pennsylvania State University, 1974.

domain of the other sex. There are a number of professions that can be categorized as sex-typed. The home economics profession was selected as the area for investigation because its membership is predominantly female. Thus, the study examined relationships between sexist attitudes, professional commitment and selected demographic variables to determine attitudes of home economists toward the acceptance of males into the field of home economics.

The general hypotheses for the research were that (1) acceptance of individuals into a sex-typed profession will differ among higher and lower professionally committed individuals and (2) degree of acceptance will differ systematically with selected demographic variables.

SAMPLE

Five hundred and thirty (530) administrators and faculty who were members of the college and university section of the American Home Economics Association from throughout the United States and Canada were solicited by mail for participation. Three hundred and fifty-six (356) persons responded to and returned the data collection materials of which 270 (75.8%) responses were usable. The sample consisted of 211 females and 59 males. These figures represent 47.4 percent of the females and 69.4 percent of the males solicited.

INSTRUMENTATION

Instrumentation involved the development of the Sexist Attitude Inventory for assessing the attitudes of home economics professionals toward males entering the field. A Personal Data Sheet was developed to gather demographic information. Loftis' (4) Measure of Professional Commitment was used to determine the professional commitment of subjects.

Sexist Attitude Inventory

The Sexist Attitude Inventory (SAI), was designed to measure the attitudes of discrimination against members of a particular sex. It evolved from an open-ended questionnaire administered to 200 male and female faculty and graduate students from the Colleges of Education, Human Development, and Engineering at The Pennsylvania State University. Its purpose was to elicit statements indicative of attitudes regarding the placement of men in home economics positions and the implications thereof. The 127 responses received from the questionnaire were culled and refined. The refined statements were then assembled into an inventory of 46 items and pilot-tested with 175 male and female graduate students in fields related to home economics. Ninety-six responses were returned. Of the responses, 80 were deemed usable and were analyzed to determine instrument reliability.

The forty-six statements were subjected to an item analysis including the computation of a Kuder-Richardson formula 20 reliability. The resulting reliability was .996. Because the estimate of reliability indicated a high degree of internal consistency for the instrument, all 46 items were retained in the final form of the SAI.

The researcher undertook the measuring of individuals in terms of their degrees of agreement or disagreement on a four-point scale. When scoring this inventory the 19 positively stated items were weighted with a value of 4, 3, 2 and 1, respectively, from "strongly agree" to "strongly disagree." The 27 negatively stated items were weighted 1, 2, 3 and 4, respectively, from "strongly agree" to "strongly disagree." Each individual, then, had a score for every item in the instrument ranging from one to four. The sum of the scores was deemed representative of an individual's attitudinal status.

Total range of scores on the SAI was 88 to 148 out of a possible 0 to 184. Total sample mean of 122.70 and a standard deviation of 11.71 was determined by a statistical summary.

Using data from the 270 subjects in the study, a Rabinowitz and Eikeland (5) analysis of variance reliability was computed. This analysis produced a reliability estimate of .826 with a mean inter-item correlation of .094.

Additional reliability information was obtained from a Likert analysis. Summary information of this analysis is presented in Table 1. The Guttman's Lambda-3 Index of Reliability was .876 and computation of the Coefficient Alpha Index of Reliability reported an estimate of .832. Based on the Coefficient Alpha, the standard error of measurement was 4.227 and the estimated average inter-item correlation was .097. These reliability estimates indicate that the SAI demonstrates a high level of internal consistency with a minimal overlap in item performance.

TABLE 1. Descriptive Information on the Sexist Attitude Inventory

Number of Items	46
Number of Response Categories	4
Number of Respondents	270
Guttman's Lambda-3 Index of Reliability	.876
Coefficient Alpha Index of Reliability	.832
Standard Error of Measurement[1]	4.227
Estimated Average Inter-item Correlation[1]	.097

[1]Based on Coefficient Alpha

Personal Data Sheet

The Personal Data Sheet was developed to collect information regarding the respondents' age, gender, salary level, length of time in profession, and professinal achievement.

Measure of Professional Commitment

The Measure of Professional Commitment (MOPC) was developed by Loftis in a study undertaken to investigate the extent to which teachers differ in their commitment to the teaching profession. In this study the total sample ranges of scores for home economists on the MOPC was 98 to 193 out of a possible range of 0 to 200. Mean score was 160.80 with a standard deviation of 17.34.

ANALYSIS AND FINDINGS

Professional Commitment

Loftis used professional commitment to describe teachers who are serious in their intent to remain in the profession and to make their efforts count in achieving high quality in education. In this study professional commitment is used as a variable in examining differences in attitudes of acceptance toward males entering the field of home economics.

Subjects were divided into higher and lower professionally committed groups on the basis of their scores on the MOPC. One hundred and thirty-three (133) subjects with scores above the median of 164 were designated as "higher committed" and 131 subjects with scores below 164 were designated as "lower committed." A t-test of differences between mean MOPC scores of higher and lower commitment groups resulted in a t-value of 22.47 (significant, $p < .01$).

Employing professional commitment as an independent variable, t-test was computed on SAI total mean scores of the higher and lower commitment groups resulting in a nonsignificant t-value of .76. Evidence emerged from the analysis of data to conclude that professional commitment is not associated with attitudes of acceptance toward males entering the field of home economics.

The MOPC instrument used in this study was intended to measure the degree of professional commitment of the sample to the field of home economics. However, the questions asked did not specify "home economics." Thus it is possible a respondent could be professionally committed to an area of expertise or to a particular discipline such as sociology or psychology, and not to home economics.

Professional Achievement

Professional achievement is defined in this study as duties, activities or involvement undertaken or performed other than teaching or regular administrative duties which can be construed as indicative of intentions to achieve professionally.

Ten variables all considered indicators of professional achievement were employed in this study to determine their effect upon attitudes of acceptance. It was found that only one variable, office(s) held in professional organizations, was associated with significant differences in attitudes. Data emerging from this variable suggests that subjects who do not hold office(s) in professional organizations demonstrate attitudes of acceptance toward males entering the field of home economics to a greater degree than do subjects holding such offices. With the

exception of this one variable, professional achievement as defined in this study does not appear to be associated with differences in attitudes of acceptance toward males entering the field of home economics.

Gender

Males constitute a very small percentage (1%) of the home economics membership. Male participation, however, in this study was 21.8 percent of the sample. Considering the premise of the study, one might suspect that the males would be more accepting of males entering the professional area of home economics than females. The males' attitudes of acceptance as measured by mean SAI scores support this thesis. The males reported a mean SAI score of 127.07 while females reported a mean of 121.45. The results were significant ($p < .01$).

These findings might suggest that males are expressing a dissatisfaction or discomfort with their small numbers in the professional field. The higher scores might further suggest that males view the influx of additional males beneficial to the balance, growth, and expansion of the field. A growing recognition that the subject matter of home economics is relevant to the male as well as female interests could contribute to this feeling. On the other hand, the lower female scores suggests that they are less accepting than the males, and more likely to view the influx of males as a threat to their dominance and position in the field. Within the past two decades, according to Bernard (6), men have been assuming some of the high administrative and faculty positions in home economics previously held by women.

Other Variables

In the development of this study, five other demographic variables were selected as having potential for influencing attitudes of acceptance. These variables include professional rank, salary, marital status, age and work experience. Results of a series of analysis of variance tests computed on relevant data did not establish these variables as systematically associated with differences in attitudes of acceptance towards males entering the home economics profession.

Additional Findings

Collaborating evidence substantiating previous findings was provided by supplementary data collected from the respondents to the following questions: How many years have you worked closely in a professional position with members of the opposite sex? Did you start your career in a home economics field? How many years were you in other field(s) before transferring to your present employment? How many years have you been in home economics? Are you a full-time employee? Of the five variables, four appear not to be associated with differences in attitudes of acceptance toward males entering the field of home economics. The remaining variable, years in home economics, was significant ($p < .05$) suggesting that the length of career in home economics is associated with differences in attitudes of acceptance toward males entering the field of home economics. A closer examination of the data indicated that those subjects with less time in the profession demonstrated greater acceptance of males than subjects with more years of experience in the profession. The threat of a male domination of one of the few remaining professions freely open to women may be the motivating factor as to why the group with greater professional longevity is less accepting of the males entering the field. In addition, this experienced group, being older may have been subjected to subtle sex discrimination in their career development, and now may have reservations about men entering the field.

The findings from this study were confined to a sample of home economists who were administrators and faculty members throughout the United States and Canada and who held membership in the college and university section of the American Home Economics Association. This section constitutes approximately one-tenth of the total membership in the AHEA. One must be relatively cautious, therefore, in generalizing beyond these data. Furthermore, it should be established that some of the analyses may have been biased because of the small number of males who participated in this research. However, the proportion of the male to female subjects in this research sample is higher than the proportion of male to female professionals in home economics. Therefore, replication of this study is advocated with other home economists.

The Sexist Attitude Inventory may prove to be a viable research tool for assessing the attitudes of acceptance in other sex-typed professions thus providing a basis for comparative studies among such professions. For example, the leaders in engineering are now actively seeking women in that field. The Sexist Attitude Inventory may be useful in illuminating attitudes of engineers toward accepting women in that field.

Although this study was not designated to investigate discriminatory sexist attitudes in employment, it is foreseeable that it could provide impetus for others to pursue research in the area.

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Sexist Attitude Inventory

You are requested to read and respond to each statement below in the column to the right which best describes your reaction.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I believe that when males enter home economics salaries increase.	____	____	____	____
2.*	I believe that when males enter home economics their salaries will likely be higher than those of comparable females in the field.	____	____	____	____
3.	I believe that when males enter home economics the image of the profession is enhanced.	____	____	____	____
4.*	I believe that when males enter home economics they tend to assume leadership roles.	____	____	____	____
5.	I believe that when males enter home economics they are readily accepted.	____	____	____	____
6.*	I believe that females resent the entry of males into home economics.	____	____	____	____
7.*	I prefer to work with female professionals in home economics.	____	____	____	____
8.	I prefer to work with male professionals in home economics.	____	____	____	____
9.*	I feel less emotional pressure when my immediate superior is a female.	____	____	____	____
10.	I feel less emotional pressure when my immediate superior is a male.	____	____	____	____
11.*	I believe that the hiring of males in a female dominated profession is a political move.	____	____	____	____
12.*	I believe it would be more difficult for me to assume a position of leadership in a profession where my sex was in the minority.	____	____	____	____
13.*	I believe that males can assume leadership roles in home economics more easily than in disciplines which are not dominated by women.	____	____	____	____

*Negatively stated items are reverse scored.
From A. Bentivegna, *Attitudes of Home Economics College and University Professionals Toward Males Entering the Field.* Unpublished doctoral dissertation, The Pennsylvania State University, 1974, pp. 87-90.

		Strongly Disagree	Disagree	Agree	Strongly Agree
14.	I believe males are better administrators of home economics.	____	____	____	____
15.*	I believe females are better administrators of home economics.	____	____	____	____
16.*	I believe that males in home economics generally have a higher rank than females with comparable education and experience.	____	____	____	____
17.*	I believe that males in home economics are often considered effeminate.	____	____	____	____
18.	I believe that males who enter home economics are more readily accepted if their credentials show a great amount of experience.	____	____	____	____
19.	I believe competence, not sex, should be the criterion for acceptance in home economics.	____	____	____	____
20.*	I believe that males entering home economics with a higher position than their female colleagues are not readily accepted.	____	____	____	____
21.*	I believe that working with both males and females is more rewarding than working with colleagues of one's own sex.	____	____	____	____
22.*	I feel threatened by the movement of males into home economics.	____	____	____	____
23.*	I believe my job will be more secure when my immediate superior is a female.	____	____	____	____
24.	I believe my job will be more secure when my immediate superior is a male.	____	____	____	____
25.	I believe as more males enter home economics, the stigma of home economics as a women's field will diminish.	____	____	____	____
26.	I believe that when males enter home economics they provide for better liaison with other fields.	____	____	____	____
27.	I believe the presence of males in home economics will strengthen the field.	____	____	____	____
28.*	I resent males taking over the leadership positions in home economics.	____	____	____	____
29.*	I believe home economics is not prepared to accept large numbers of males into the field.	____	____	____	____
30.*	I believe that when a male is awarded a deanship in home economics, women lose some power in the profession.	____	____	____	____
31.*	I believe that as long as home economics remains a female dominated profession, it will remain a discipline of lesser status.	____	____	____	____
32.	I believe that a male could be elected to the presidency of the American Home Economics Association.	____	____	____	____
33.*	I believe the presence of males in home economics may be unsettling to some females.	____	____	____	____
34.*	I believe that males are uncomfortable and on the defensive working in home economics.	____	____	____	____
35.	I believe if home economics is to meet its professional goals, male participation is essential.	____	____	____	____
36.*	I believe males in home economics destroy the tradition of the field.	____	____	____	____

	Strongly Disagree	Disagree	Agree	Strongly Agree
37.* I believe that males entering home economics do not respect the female colleagues.	___	___	___	___
38.* I believe that females might be uncomfortable and defensive working with males in home economics.	___	___	___	___
39. I believe home economics is ready to accept large numbers of males into the profession.	___	___	___	___
40.* I believe home economics could achieve its professional goals without male participation.	___	___	___	___
41.* I believe that a predominancy of women faculty are needed in home economics to provide models for the predominance of female students.	___	___	___	___
42.* I believe that an influx of men into home economics will weaken the field.	___	___	___	___
43. I believe that males in home economics will provide new outlooks for the development of the field.	___	___	___	___
44. I believe the presence of males in home economics fosters a healthy dialogue within the field.	___	___	___	___
45. I believe the presence of male professionals in home economics will encourage greater participation at all levels of the discipline.	___	___	___	___
46. I believe males will be helpful in implementing changes in home economics.	___	___	___	___

The focus on the recent participation of males has tended to overshadow the substantial contributions men have made to the home economics movement in the period of its establishment and infancy. While all presidents of the American Home Economics Association have been women, men were well represented as pioneering office-bearers. Benjamin R. Andrews was probably the most notable of these. He served as Treasurer 1909-1911, Secretary 1909-1912, Vice-President 1913-1916, and was co-editor for the first three issues of the *Journal of Home Economics*.

Another noteworthy man was C. F. Langworthy. He served as Treasurer from 1913-1914, Vice-President from 1909-1912 (and again from 1918-1921) and was co-editor of the first three issues of the *Journal of Home Economics*. A prolific writer, Langworthy's chief interest was in food and nutrition, and he was widely recognized for his calorimeter experiments and early work in soybeans as food. Howard Knight, the AHEA Treasurer in 1912, was known for his interest in dietary studies and his work in agricultural experiment stations. William Morse Cole was Treasurer from 1914-17 and was an author in accounting and auditing. H. Gale Turpin had the distinction of serving as Treasurer from 1917-1935.

USING FICTION AND DRAMA IN FAMILY LIFE EDUCATION

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In their very understandable enthusiasm for increasingly basing family life education on research findings, scholars have sometimes seemed to imply that research is the *only* producer of wisdom about family relationships. Teachers know better, of course, and they use a variety of approaches in teaching about the family in their classrooms. An increasingly popular approach to the study of family life is through the use of fiction and drama.

Using creative literature in the study of family is not a new approach. Almost 40 years ago, The Commission on Human Relations published *Thicker Than Water: Stories of Family Life* (Wunsch & Albers, 1939), a collection of short stories about family relationships. Sociologist Rose Somerville published her doctoral dissertation in 1964 as *Family Insights Through the Short Story*, and later wrote several articles about this teaching method (collected in Somerville, 1972). In 1975, two important contributions to this approach appeared: Somerville's *Intimate Relationships: Marriage, Family and Lifestyles Through Literature* and Tavuchis and Goode's *The Family Through Literature.* In 1976 Clear's *Marriage and the Family Through Science Fiction* appeared.

As these publications make clear, the use of creative literature in the study of the family is especially potent if it is seen as an ally for—not a replacement of—good research. Tavuchis and Goode (1975) note that today there is a close relationship between the literary and the scientific approaches to wisdom: The novelist, for example, cannot write about people, places and events unless he carefully researches these topics first, and the scientist cannot really understand his phenomenon unless he knows what the poet and novelist experienced when they dealt with the same topic. Social scientist Fernandez (1972) underscores the necessity of our paying attention to both kinds of family studies, the scientific and the literary: ". . . this (literary) approach is intended as a complement to, and not a substitute for, scientific investigation. There is, in my opinion, no substitute for the painstaking analysis that is inevitably necessitated if we are to offer conclusive proof for our assertions. However, I believe that, just as literature can never be a substitute for empirical proof, so too science, in and of itself, can never truly compensate for the limitations that its methods necessitate. The literary artist is one of the few who can help us to do that" (pp. xvii-xviii).

Specific advantages to using literature in the teaching of family relationships, as noted by various authorities in the field, include:

1) Fiction and drama provide dramatic examples of psychological and sociological generalizations about families.

2) They provide insights about aspects of family life not treated by more academic works.

3) These writings raise hypotheses and in other ways stimulate research.

4) They provide vicarious experiences otherwise not available to the reader.

5) They stimulate the reader's identification and empathy with other kinds of people.

6) Via projection, they allow the reader safely to study himself while seemingly studying a fictional character.

7) These writings not only alert the reader to ways of life that he did not know existed, but they also provide him with new solutions to personal and social problems.

8) Fiction and drama are enjoyable ways of learning, and story-telling is an almost universal way of teaching about life.

Of course, using fiction has some limitations too. Teachers note that pupils do not always "get the point" of a piece of fiction—at least not the point the teachers want them to get. Also high school and college pupils often do not read novels and plays, and claim, even as teachers do, that they do not have the time for this kind of reading. That probably means that teachers must supply the specific literature they want to use for educational purposes rather than

The excerpts from fiction and drama used in this article have been edited to some extent, not to improve their literary quality, but to fit them into available space.

The arguments for using fiction and drama in family life education—as well as illustrations of how it can be done—are found in the video tape, "Family Images in Fiction and Drama," written by Richard Kerckhoff and produced by the Center for Telecommunications, Purdue University. This color video tape is available for classroom use from Mr. G. W. O'Brien, Continuing Education Administration, 116 Stewart Center, Purdue University, West Lafayette, Indiana 47907. It can be purchased on one-half inch tape for $30.00 or in a three-fourths inch tape cassette for $35.00. Either tape can be rented for $20.00.

assume that pupils will have a repertoire of past readings. Sometimes family life education teachers can capitalize on material that is being read in another classroom such as in English literature. The teacher who does not already have a background in the use of novels and plays and who normally does not read these materials often wants a ready-made list of recommended works. Our experience, however, is that nobody else can provide us with a really useable list of novels, plays, etc.; we usually have to build our own repertoire.

In our classes we try to make the "double-barreled" approach—combining research and creative literature—quite explicit. For example, in teaching about the varieties and types of marriages, we turn to research for the marital typology of Cuber and Harroff (1965). Among the five general types of marriage discovered by the researchers is one they term "Conflict Habituated." In this marriage, say researchers, tensions and conflicts are always present but are usually controlled in the presence of others. Students often suggest that George and Martha in Albee's *Who's Afraid of Virginia Woolf?* are a Conflict Habituated couple, and so they are, of a very extreme variety. Here are some lines from that play that I use with college classes for illustration:

Martha: You pig!
George: (*Haughtily*) Oink! Oink!
Martha: Ha, ha, ha, HA! Make me another drink . . . lover.
George: My God, you can swill it down, can't you?
Martha: (*Imitating a tiny child*): I'm firsty.
George: Jesus!
Martha: Look, sweetheart, I can drink you under any goddamn table you want . . . so don't worry about me!
George: Martha, I gave you the prize years ago. . . . There isn't an abomination award going that you . . .
Martha: I swear . . . if you existed I'd divorce you . . .
George: Well, just stay on your feet, that's all. . . . These people are your guests, you know, and and . . .
Martha: I can't even see you. . . . I haven't been able to see you for years. . . .
George: . . . if you pass out, or throw up, or something . . .
Martha: . . .I mean, you're a blank, a cipher . . .
George: . . . and try to keep your clothes on, too. There aren't many more sickening sights than you with a couple of drinks in you and your skirt up over your head, you know . . .
Martha: . . . a zero . . .
George: . . . your *heads*, I should say . . . (pp. 16-17)

George: . . . I don't mind your dirty underthings in public . . . well, I *do* mind, but I've reconciled myself to that . . . but you've moved bag and baggage into your own fantasy world now, and you've started playing variations on your own distortions, and, as a result . . .
Martha: Nuts!
George: Yes . . . you have.
Martha: Nuts!
George: Well, you can go on like that as long as you want to. And, when you're done . . .
Martha: Have you ever listened to your sentences, George? Have you ever listened to the way you talk? You're so frigging . . . convoluted . . . that's what you are. You talk like you were writing one of your stupid papers.
George: Actually, I'm worried about you. About your mind.
Martha: Don't you worry about my mind, sweetheart!
George: I think I'll have you committed.
Martha: You WHAT?
George: (*Quietly . . . distinctly*) I think I'll have you committed.
Martha: (*Breaks into long laughter*) Oh baby, aren't you something!
Martha: (*Fake-spits at him*) You're going to get it, baby.
George: Be careful, Martha . . . I'll rip you to pieces.
Martha: You aren't man enough . . . you haven't got the guts.
George: Total war?
Martha: Total. (pp. 155-159)[1]

But marital conflict is not always in the George and Martha style. Sometimes it is more physical, and other times it is so subtle that we might not even recognize it as conflict. I like to illustrate with a passage from Peter de Vries' *Through the Fields of Clover:*

> He had returned from work one evening the first winter of their marriage to find her shoveling snow in a mink coat, hacking at the doorstep with a garden spade, for hadn't he also neglected to get a proper shovel? . . . He had marched into the house and pulled from the bureau drawers all the

[1]Reprinted with permission, Edward Albee, *Who's Afraid of Virginia Woolf?* Copyright, Pocket Cardinal, New York.

shirts he could find without buttons and sewed them on. Thus, when she came in, it was to find *him* doing *woman's* work, equally neglected if it came to that. It was how they fought, doing one another's chores. She would mount the ladder and put up the storm windows he had been badgered in vain to get at; coming home to find that all shipshape, he would tramp inside and wash dishes let accumulate in the sink. Once a woman dropped in, of the neighborly sort who do so without knocking, to find both of them sitting on the parlor floor, polishing one another's shoes. "Aw," she said, beaming on the scene, "how sweet. I wish Jack and I got along like that" (p. 112).[2]

Among the other marital types noted by Cuber and Harroff are the "Devitalized" and the "Passive Congenial." Devitalized couples have a relationship that seems to have died; at least it is devoid of depth. Passive congenial couples, the researchers tell us, have a comfortable relationship with little conflict and with a nice division of labor. But they relate to each other carefully, "tiptoeing around areas of resentment and repressing hostility." Cuber and Harroff found a good many Devitalized and Passive Congenial marriages, and most students seem to recognize these types in the actual marriages they know. Authors of fiction seem to recognize these types, too, although sometimes it is not clear just which of the two types is being depicted. A very nice elderly couple in Robert Anderson's play, *Solitaire and Double Solitaire*, separately describe their marriage:

Ernest: So, you coast . . . as I said. Just be happy you can get from one end of the week to the next. Join some clubs. Find some committees. All those committees I'm on . . . Scenic Preservation . . . Museum of Natural History . . . Boy's Club . . . You don't think I'm really interested in all these things? . . . But they have meetings . . . And I've got my hobbies . . . Shot an eighty-six yesterday . . . And my cameras. Then there's the Board of Education . . . YMCA . . . We go to the movies at least once a week, and one night in my darkroom . . . Time passes. (p. 47)

Elizabeth: And we have a good life. I have my garden, though I can't work in it as much as I used to. And there's the church . . . and I read a good deal. And Ernest and I play cards. I always hated cards, but he finally persuaded me . . . We play double solitaire . . . You know, each one lays out his own deck, but you put the aces in the center as they come up, and each builds on them . . . The play of the cards is lively. We have little jokes about the game . . . I slap his hand when he plays on a card I was about to build on. And we laugh. And he teases me . . . It gives us something to do together (p. 40).[3]

Interestingly, Ingmar Bergman's character in *Scenes From a Marriage* described her recent marriage in much the same way, and even started with about the same words used by Anderson's woman:

Mother: We had a good life. Sometimes we fell out, it's true, but we never quarreled. We never stooped to humiliating and insulting each other. We kept silent instead. And it was best like that. By degrees the hostility faded away and we forgot our differences. Neither Fredrik nor I was one to nurse a grievance.
Marianne: No.
Mother: Of course I miss him. But actually I don't feel any more alone now than when he was alive.
Marianne: I'm sorry to hear that.
Mother: Why? Both of us were kept busy. He with his affairs, I with mine.
Mother: I wonder how it would have been had we confided in each other. If we had talked over everything that occurred to us.
Marianne: And you never did?
Mother: No. We had a rule that our parents taught us: Each one copes with his own troubles.
Mother: I don't know. But it *is* ghastly. No, not ghastly, that's far too dramatic a word. It's extraordinary that two people live a whole life together without . . .
Marianne: Without touching each other.
Mother: Perhaps that's what I mean. (pp. 178-180)[4]

A limitation of current fiction and drama is that they provide many more examples of Conflict Habituated, Devitalized and Passive Congenial marriages than they do of Cuber and Harroff's other two—more positive types, the Vital and Total marriages.

It is not only in the study of marital types that fiction and research provide the teacher with double-barreled teaching approaches, however. When we teach about parent-child relations, we review the research, most of which seems overwhelmingly to point to the dilemmas

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[3]Reproduced by permission, Robert Anderson, *Solitaire and Double Solitaire.* Copyright Random House, Inc., 1972.
[4]From *Scenes from a Marriage* by Ingmar Bergman, translated by Alan Blair. Copyright 1974 by Alan Blair. Reprinted by permission of Pantheon Books, a Division of Random House, Inc.

of bringing up children in a complex and rapidly changing society such as ours. Fiction also illustrates this theme. For example, in his novel, *Something Happened,* Joseph Heller tells us through the words of a father who truly loves his son, how difficult it is to know when and how to discipline a child, or even, sometimes, why we are doing so:

> He used to give money away (probably still does . . .) . . . pennies, nickles and dimes. . . . We didn't want him to. I used to try to explicate for him with professional authority why it was improper for him to give presents that we gave him away to somebody else, and that the money we gave to him was a present. It was talking to the wall. He would hear me out dutifully every time; but he would not grasp what I meant. His face was vacant, patient, and condescending. I did not know what I meant either, or why I even tried to make him stop. . . . I think he still does give money away. . . . I *hope* he does (even though I've told him he shouldn't), for I would like him to be unselfish. So why did I harangue him? . . .
>
> I feel so foolish and so ashamed for the way I acted (and perhaps will act again). No more than a penny, nickel or dime was ever involved. But what furors we raised, my adult wife and I. . . .
>
> I am overwhelmed with remorse. And yet, I know instinctively that I will do it again if he does it again and I catch him, or at least I will feel the urge to. I hope I restrain myself. I know I feel that what he does is wrong. I don't know why it is wrong. I don't know why I feel it is. . . .
>
> For my own part, I honestly believe I was motivated mainly by a protective and furious desire to safeguard him against being taken advantage of by other children. . . . It was as though I myself were undergoing the helpless humiliation of being tricked, turned into a sucker. My own pride and ego would drip with wounded recognition. That's when I have been most enraged by him, when I wanted to smash and annihilate him, at those times when I felt, in a flaring outbreak of nearly unbridled bitterness, that he was allowing himself to be victimized and bullied by other children. So *I* bullied and victimized him, instead. . . .
>
> I have always wanted him immune to abuse and defeat. So I abused and defeated him instead. . . . I never could bear to see him unhappy . . . so I made him unhappier still. . . .
>
> . . . if we had been asked to pick between a child who liberally gave away his pennies, nickels and dimes that he did not want or need for himself and one who would always hoard them only for his own use, we would have chosen exactly what we had. We *liked* what we had. (So why did I try to change him?) If I were him . . . I think I would hate me now.
>
> He continued to love me anyway. (pp. 258-317)[5]

Similarly, in our studies of divorce—to use a final example—we turn to the research and find it excellent for teaching about the numbers of divorces, numbers of children involved in their parents' divorces, number of years couples are married before divorcing, remarriage rates of divorcees, etc. But except in a few scattered pieces of research, we find very little about how divorce *feels*—how it feels to the divorcees, to the children, to friends of the couple and to others involved. Again, creative literature can help us. In his novel, *Starting Over,* Dan Wakefield lets us know how divorce feels to his chief character, Phil Potter. Potter is going to survive his divorce; in fact, he, like most divorcees, will remarry. But first he must adjust to the new status of divorcee—and it has hit him hard:

> Potter was lucky; everyone told him so. "You're lucky," they said, "that you didn't have any children." Potter indeed was glad that he hadn't brought any innocent parties into the mess, but the fact that things could be worse is little comfort when they're bad enough. The truth was, divorce had disappointed him. Maybe, like marriage, he had expected too much of it. He naturally assumed that when he got the divorce he would feel a sense of relief and release.
>
> He got a postcard from Port au Prince, with a beach scene. It wasn't signed, it just said, in Jessica's carefully manicured script: "You're free now." *Free.* The word sunk into him like a stone. Instead of relief, he felt a kind of interior pain that varied from dental-drill intensity to a second-hand ache (pp. 11-13).

> One thing was sure: Saturday night was approaching, a grim specter. Saturday Night! It was hallowed and feared and anticipated, lyricized in story and immortalized in song. The loneliest night of the week. The night when my sweetie and I used to dance cheek to cheek. . . . Beginning at puberty, all good American girls and boys were trained and drilled and instilled with the understanding that not having anything to do on Saturday night was a stigma so great that it marked the week as a failure, meant that you were Undesired or Undesirable or Undesiring, marked you as a malcontent or malcontented, a malignant and/or malingering member of society. So either you went out, accompanied, or you hid. Pretended to be Busy, pulling the curtains of your room about you, the covers over your head, the lamps dimmed, the music stopped. Ho ho ho. High school stuff. College stuff. Life stuff. Potter felt sure that Senior Citizens were still plagued by it. It was worked inside your head so deep, you could never really get it out, never just sit around quietly somewhere in America on Saturday night, reading a good book, without feeling guilty or cheated.
>
> (And then) it was Sunday, the worst of days, the hardest one to get through alone. It yawned open, a pit of silence. There was little traffic, most of the shops and stores were closed, and the sidewalks were almost deserted. Potter once was able to fill up a large hunk of the day in football season by watching The Pros, but this year, on the second autumn Sunday, watching the Houston Oilers combat the Oakland Raiders, Potter was swept with a wave of depression. . . . (He) had a deep and despairing feeling that he was watching the same game he had watched ten years before, that it was all the same, the plays and uniforms and the announcer's analysis, that nothing was different except

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[5]Reprinted with permission. Joseph Heller, *Something Happened.* Copyright Alfred A. Knopf, Inc., 1975.

Potter, who was ten years older, with little to show for it; that in another ten years he would still be sitting on a Sunday afternoon and watching the same game, just that many more relentless seasons closer to The End (pp. 80-92).[6]

These three examples illustrate how fiction and drama provide the teacher with a powerful instructional aid, and provide the pupil with an approach to wisdom about family relationships that should complement other methods of study. Although the examples deal with just three topics, marital types, child-rearing and divorce, they are illustrative of an approach that can be used for almost any major topic in our curriculum, being limited only by our imaginations and our ability to find appropriate materials. As noted earlier, this method of learning should be enjoyable to the pupil. There is hardly a person of any age, IQ, or academic inclination who does not like a good story. But when combined with good research materials, fiction and drama should also be educational; they should leave a vivid and lasting impression on the student's mind. And, according to social psychologist Fernandez:

> Literature forces us to come back to man, to remember, in fact, that the pursuit of scientific truth is primarily a means—a means to the betterment of the human condition. This concern is where the social sciences began; and we must never lose sight of it. For anybody can be a scientist. The real task is to be a truly *human* being (p. xviii).

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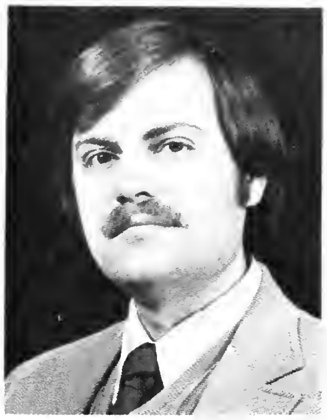

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PERSPECTIVES ON THE FAMILY IN THE YEAR 2000

The family in the year 2000 will probably be a reflection of what is beginning to emerge as we see the last quarter of the 20th century rapidly fading into the 21st century. There is little reason to doubt that the family will survive and, to some degree be strengthened, over the next quarter of a century. Marriage and family enrichment programs are fast becoming a vital part of the growth-conscious human potential movement that is visible in many areas of life.[1] At the same time we see evidence of the family being revalued, we also see a strong surge for individuality and the emergence of a wide variety of life style options that have been adopted by many of the persons who feel frustrated and trapped by the family as we know it today.[2] Many persons are no longer content to follow the dictates of tradition for tradition's sake. Now people—individuals, couples and families—are searching for meaning in life and questioning the value of traditional patterns of living and family life. Some will find that their interpersonal needs are being stifled by the traditional family's structure. Many of these persons will seek new ways of making the family adaptable and meaningful to them, while others will choose to abandon the notion of finding meaningful fulfillment in the family as they search for other alternative life styles and patterns of living. Although there is no accurate estimate of how many people live in each of the variant alternative and adaptive life styles, the 1970 United States Census[3] reports that only 37 percent of the population live in nuclear families (defined as being composed of a husband/father, who is the family breadwinner, a housewife/mother, who stays home and cares for their dependent children living in the household).

The purpose of this article is to explore some of the directions that the family in the year 2000 will likely follow. Special attention will be paid to key socio-demographic trends as well as social psychological factors that have emerged as possible indicators of social change and family adaptability to the stresses of an ever-changing, post-industrial society.

THE CHANGING SOCIAL ENVIRONMENT

We live in a post-industrial era where the family is no longer viewed as the basic economic unit of production. The family of today is a consumption unit. Societal complexity has grown to such an extent that the family serves primarily as a social psychological unit that is economically interdependent upon the external society and community in which it exists. The social well-being of the family is increasingly becoming interdependently linked to the wider society in the political, economic, religious and educational sectors. This implies that all families in the year 2000, regardless of race, ethnicity, class and ideology, must be socialized to be active in the promotion and enhancement of family life.

Families of today have become accustomed to living at an ever increasing standard of living that is based upon higher levels and rates of material consumption. This relative increase in both the quantity and quality of consumption is based upon social psychological forces that lead families to continually raise their expectations of what the good life should be.

The author would like to thank the Home Economics Research Institute, Iowa State University, Ames, Iowa for research support during the writing of this paper, and Anna L. Cole for reading the paper and making many suggestions which have been incorporated.

[1]Herbert Otto, *Marriage and Family Enrichment: New Perspectives and Programs* (Nashville: Abingdon, 1976); David Mace and Vera Mace, "Marriage Enrichment—Wave of the Future?" *The Family Coordinator,* April 1975, p. 131; David Mace and Vera Mace, *We Can Have Better Marriages If We Really Want Them* (Nashville: Abingdon, 1974).

[2]Marvin B. Sussman, ed., *Non-Traditional Family Forms in the 1970's* (Minneapolis: National Council on Family Relations, 1972); and *The Family Coordinator,* "Special Issue on the Second Experience: Variant Family Forms and Life Styles," October 1975.

[3]Paul C. Glick, "A Demographer Looks at American Families," *Journal of Marriage and the Family,* February 1975, pp. 15-26; *1970 Census Population,* Vol. II, 4B, "Persons by Family Characteristics," Washington, D.C.: U.S. Government Printing Office, 1973; "Marital Status and Living Arrangements: March 1974," *Current Population Reports,* Series P-20, No. 271, Washington, D.C.: U.S. Government Printing Office, 1974.

To some extent this trend will probably or likely continue in the 21st century, although there are countervailing forces that may well temper the impact of rising expectations throughout the coming decades. Some of the countervailing forces viable today are seen in the social movements of human concern that have attempted to point out that the value of individual growth and human potential is more important than materialism. Some environmentalists think that we will have shortages due to the limited supply of natural resources. By the year 2000, however, there is a good chance that the environmentalist and human liberation movements will have made great strides to sensitize the people of the 21st century to the value of preserving the environment by a wise use of natural resources and rational population control through family planning, thus improving the quality of life for all. In this context, quality of life denotes a social-psychological as well as physical well-being. This implies that a higher level of collective consciousness may be visible in the coming decades.

EMERGING VALUES IN THE YEAR 2000

Several values that have begun to compete for our time and energy in the 20th century will be of even more importance in the 21st century. Of the more dominant values that will play an important role in the lives of 21st century families, the value of individuality and interpersonal growth will likely have the greatest impact upon the organization of family living. This means that the family will give more importance to adapting to serve the needs of individuals than it has ever done before. The emotional well-being as well as the physical well-being of children and adults will likely be of equal importance.

The trend for persons to strive for more than physical comfort and material rewards has already manifest itself in our affluent society. Today we find more people giving up safe and materially successful lives to search for meaning in life. These types of existential questions have been asked by a minority segment of the population of almost every society and culture throughout the history of civilization. In the past, however, these questions have only been asked by an elite minority of privileged individuals who were freed from the tasks of contributing to the material production in the society. The social organization of our society is becoming so sophisticated that the division of labor required to keep the material forces of the society functioning will require less work time. Thus, most 21st century inhabitants will likely enjoy the luxury of abundant physical and material resources with ample time to pursue leisure interests. This increase in the amount of time available for leisure will have some serious ramifications for the family.

Research by sociologists on leisure indicates that most Americans do not really know how to effectively manage their leisure time. The Protestant Ethic of hard work has been so deeply engrained into the attitudes of today that most persons find relaxation and idle time difficult to cope with. This means that the family of the 21st century will need to be socialized to enjoy and use the leisure time available. Leisure research has also indicated that the family is not necessarily drawn closer through recreational pursuits. In fact, many families find that they are individually drawn to different interests and spend most of their leisure time separately. One study found that the family is valued as less important than the recreational activity.[4] This may mean that 21st century family life will be so segmentalized that the family members are mere strangers to one another due to a lack of common interests and time together. This feeling that they are strangers in their own family will no doubt have an alienating effect upon many who will seek to flee from the family.

RECENT TRENDS TOWARD TRANSITIONARY LIFE STYLES

There is evidence that people in American society today make life transitions from one stage to another. In the 21st century there may be more life style transitions and they may be made more frequently. This in part will be due to an increased awareness of personal growth and the need continually to make adaptations to life situations. We live in a world of continuously changing stimuli and adaptation to them. Individuals are becoming less satisfied to live unrewarding lives that do not meet their interpersonal needs. Therefore more and more we are finding persons breaking tradition and searching for fulfillment and satisfaction in new

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[4]John R. Kelly, "Synchronization of Leisure Conflicts in the Family Schedule," Unpublished paper presented at the annual meeting of the Midwest Sociological Society, St. Louis, Missouri, April 1976. (Available from the author upon request at the Leisure Behavior Research Laboratory, University of Illinois-Urbana.)

and experimental ways. There is a tenuous nature about the choices of life style. It is becoming fashionable to think in terms of adopting a life style for as long as it provides meaning and fulfillment. This means that fewer persons in the 21st century will stay in unfulfilling marriages. They will either terminate the relationship and individually or together move on to something else or they will work on improving the marital relationship through counseling and through interpersonal growth and introspection and thus allow their marriage to function at a higher level than it may have before.

Persons giving up traditional marriage and family patterns are opting for a means of adapting the marriage and family institution to meet more fully their own interpersonal needs. There are two primary patterns emerging. The majority are seeking to modify the existing marriage and family system by adapting the culturally prescribed norms for family life in a way that better meets their own life situation. Another pattern is emerging among a growing minority of critics of the present marriage and family system who feel that the family is obsolete and should be replaced by other means of interpersonal relationships that are being adopted by some as alternatives to the family.

The Adapter Pattern

There are a variety of ways in which the traditional marriage and family system has been adapted to meet the demands of our post-industrial society. The adapter pattern in general is based upon an open-systems principle of allowing for role flexibility and adaptability. This means that the communication patterns become more open and the needs, feelings, intentions, thoughts, and actions of all family members are clearly articulated. This type of open adaptation is concerned more with changing the ground rules for relating within the marital dyad and family system than with changing the structure of the family. These new ground rules are usually successful within a modified form of the traditional structure and seldom radically alter or completely abandon the existing structure. The degree of modification varies from much to little, depending upon the particular family.

It is beyond the scope of this paper to deal with all the adaptations possible. Rather, we will focus upon three trends which are rapidly changing the nature of the family as we move into the 21st century.

Dual-Career Families

The 1970 census[5] reports that 43 percent of the married women in the United States are gainfully employed in the labor force. There has been a steady increase in the number of women joining the ranks of men in the labor force. The labor demands of World War II created the opportunity for a substantial proportion of women in our society to take over jobs previously thought of as men's work. Many of these women continued to work in the labor force after World War II. Thus, dual work families became normative arenas for socializing the bulk of children born during the postwar baby boom. This means that children raised in this era began to find new role models for dual-career families. In dual-work families both the husband and wife may be gainfully employed with either the wife or both spouses working for economic gain rather than intrinsic satisfaction. In dual-career families on the other hand, both husband and wife are professionally committed to their chosen careers as a life's work usually for intrinsic satisfaction. For children in dual-work families the increased awareness of more androgynous family roles may serve as a transitionary framework for their own entry into dual-career families. Dual-career marriages are characteristically entered later than more traditional marriages. Individuals with career aspirations go to school longer and are usually a few years older when they enter the labor force. It is normative for males and females entering dual-career marriages to be in the mid or late twenties. This will likely continue, and marriage may be postponed even longer in the 21st century since it may take more time to prepare for entering the labor market with the advent of more knowledge to be learned and more highly complex job demands.

Marital roles in the dual-career family are shared with little gender specific criteria used in allocating a division of labor for accomplishing the household maintenance tasks. Since both are committed to careers and work for more than the money incentive, they frequently bring

[5]Glick, *op. cit.*, pp. 15-26, and U.S. Department of Labor, *Women Workers Today*, Washington, D.C.: U.S. Government Printing Office, 1971.

their work home with them and thus spend a high proportion of their time thinking about and working on career-related tasks. This means that the dual-career family is frequently frustrated by role strain from work overload on the part of both husband and wife.

Dual-career marriages produce fewer children than do traditional marriages. It is common to find dual-career couples desiring only one child or perhaps desiring to remain child-free. This in part is because of their commitment to their work as well as to the marital dyad. They simply do not feel that they have time to parent. When they do choose to parent, they are usually very conscious of the responsibilities of parenting and qualitative nurturing. Children who are raised in dual-career families are usually partly cared for by outside agents who specialize in child care and development. Thus their view of the social world tends to be somewhat broader than that of children raised in the traditional family. For a more complete discussion, see Rapoport and Rapoport's book on *Dual-Career Families.*[6]

Child-Free Marriages

The 21st century is likely to be adult-peer oriented rather than child oriented. This is because an increasingly large number of married couples are choosing not to parent. In fact, some couples with children are voluntarily giving them up for adoption because they do not want to be confined by the responsibilities of parenting. Child-free marriages tend to value highly the quality of the marital relationship. Peer relationships are the basis for child-free marriage. Couples with child-free marriages enjoy the material resources of higher than average incomes. They have more time and energy for leisure and recreational interests than do their childrearing counterparts. Child-free marriages are more prevalent in urban areas than in rural. Such couples are characteristically upwardly mobile, well-educated and middle class, religiously inactive, reared in stable homes where the mother stayed at home with them when they were children and whose mothers felt unhappy or dissatisfied with the confinements of motherhood. Marital interaction in a child-free marriage relationship is characteristically egalitarian with a great value placed on the quality of shared companionship. The marriage is usually conventional with a somewhat traditional division of labor for maintaining the home and their relationship. Those interested in more information about child-free marriages will want to consult the research findings of Jean Veevers.[7]

Family Clusters

Many persons are finding that the traditional nuclear family needs emotional and social support groups, similar to what the traditional extended family afforded in a less mobile society. Since we do live in a society where people move on an average of once every seven years, it is not surprising to find many families adapting to the stresses of an alienating urban world by seeking out sets of friends whom they love and nurture and by whom they in turn are loved and nurtured. Family clusters are frequently formed from friendship groups in neighborhoods and/or in local church groups. Most family clusters place a high value upon the process of interpersonal growth. Persons who join a family cluster value the shared responsibilities of parenting, although some have no children and/or are beyond the childbearing and rearing phases of the life cycle. Marital relationships, like most other types of deep interpersonal primary relationships, are treated as processes that are continually changing and require a great deal of work and effort to maintain in a manner that fosters interpersonal growth. One of the premises of the family cluster notion is that no one can be all things to one person and therefore it is healthy and normal to recognize one's limits as well as strengths. By having other adults around to share the dauties of parenting, children have a much wider array of role models and agents to nurture and love them in the process of growing up. To some extent, the same thing can be said of the adult members of a family cluster. They rely upon each other to share the emotional strains of providing nurturing support and love for their partners. This takes some of the tension out of the spousal role expectations for the spouse to provide emotional support for them any time the need arises. Some think that there

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[6]Ronda Rapoport and Robert Rapoport, *Dual-Career Families*England: Penguin, 1971).

[7]Jean Veevers, "The Moral Careers of Voluntarily Childless Wives: Notes on the Defense of A Variant World View," *The Family Coordinator,* October 1975, pp. 473-487; Jean Veevers, "The Child-Free Alternative: Rejection of the Motherhood Mystique," in Marylee Stephenson, ed., *Women in Canada* (Toronto: New Press, 1973), pp. 183-199; Jean Veevers, "The Life Style of Voluntarily Childless Couples," in Lyle Larson, ed., *The Canadian Family in Comparative Perspective* (Toronto: Prentice-Hall, 1975).

is a good chance that some form of the family cluster concept will become normative in the 21st century. For further information about family clusters, see the works of Bruce Pringle[8] and James Ramey.[9]

The Alternative Pattern

There have been a wide variety of experimental and variant family forms that are viewed by the participants as alternatives to the traditional family system. Many advocates of alternative family forms feel that experiencing life with a variety of types of human contact that go well beyond the traditional boundaries of the family that allows them greater opportunities to find the path to self-fulfullment. In this article we will discuss three alternative patterns that will likely be viable in the year 2000 for some to choose as alternatives to marriage in the monogomous tradition. According to Albert Ellis,[10] a noted psychotherapist and sex researcher, about 40 percent of the married women and 60 percent of the married men in American society enter at least one sexual relationship outside of the marital bond during their married lives. More and more persons are finding that the cultural prescriptions of life in a monogomous marriage and the nuclear family do not meet their interpersonal needs. In response to this deficiency, some are choosing alternative life styles that afford new opportunities for providing meaning to their life situations.

Singles

The 1970 census indicates that some 35 percent of the adult population (18 years of age and over) are single. About 10 percent are formerly married, either by the marriage ending in divorce or by death of one's spouse. The remaining 25 percent have never been married, although many will likely marry at an older age at some subsequent point in their life.

Many single persons view their current status as a transitionary state that meets their current life situation and needs while others view singlehood as a more lasting status. For those who are single by choice and do not intend to enter any type of permanent relationships, be it marriage in the traditional sense, nonmarital consensual cohabitation, group marriage, communes or any other form of relationship that implies making lasting commitments, the freedom to lead an independent autonomous life style is valued over almost anything else. They may, however, enter temporary relationships of a variety of types at any point in their life. As persons become more conscious of the value of individuality and personal autonomy, we will likely find a greater proportion of the 21st century inhabitants considering singlehood as a viable alternative to marriage and family living. See Roger Libby[11] and Peter Stein's[12] work on singlehood for a more complete discussion of this alternative life style.

Group Marriage

For those who desire to have more than one mate to share their lives with through economic, emotional, intelectual and sexual commitments, group marriage has become an attractive alternative. The Constantines define a group marriage as any relationship in which one defines himself as married to at least two other individuals, at least one of whom would be of the opposite sex. The participants in group marriage are committed to the notion that they do not belong to any one single individual but that they have a need for and a capacity to share their lives on a variety of levels with several others simultaneously. They may be involved in bisexual relationships in which they enjoy sexual relationships with one or more members of both sexes. They value sharing and cooperation in nearly all areas of living, including child rearing, working out equitable divisions of labor in supporting and maintaining the household

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[8]Bruce Pringle, "Family Clusters as a Means of Reducing Isolation Among Urbanities," *The Family Coordinator,* April 1974, pp. 175-177.

[9]James Ramey, "Emerging Patterns of Innovation in Marriage," *The Family Coordinator,* October 1972, pp. 435-456; and James Ramey, *Intimate Friendships* (Englewood Cliffs: Prentice-Hall, 1976).

[10]Albert Ellis, "Report on the Pros of Extramarital Sexual Relationships," *Behavior Today,* 7, No. 26, June 1976, pp. 6-7.

[11]Roger Libby, "Creative Singlehood as a Sexual Lifestyle: Beyond Marriage as a Rites of Passage," in Roger Libby and Robert Whitehurst, eds., *Marriage and Alternatives: Exploring Intimate Relationships* (Glenview: Scott-Foresman, 1977).

[12]Peter Stein, "Singlehood: An Alternative to Marriage," *The Family Coordinator* (October 1975), pp. 489-503; and Peter Stein, *Single in America* (Englewood Cliffs: Prentice-Hall, 1976).

as well as a variety of areas that involve interpersonal growth, emotional support and caring for one another.

Along with other types of sexually open-ended relationships such as comarital sexual mate sharing, swinging, and intimate friendship groups, the concept of group marriage will no doubt appeal to a segment of the population in the 21st century who feel a need for an alternative life style that fosters the opportunity for sexual variety, a wider basis for companionship, intellectual variety, and a means of developing new aspects of one's personality through relating to a variety of mates who share their mutual commitment to each other and to personal growth and fulfillment. See Larry and Joan Constantine's[13] and James Ramey's[14] research on group marriage and intimate friendships and other innovative alternative marriage patterns for a more complete discussion of these life styles.

Communes

Communes of various types have existed throughout the history of civilization. There is no reason to doubt that they will be around as we enter the 21st century for those who seek an alternative that places great value on commitment to a larger group. Communes are a special type of group where persons live together, cooperatively sharing in the tasks of maintaining and sustaining the life of the group. Communes typically discourage pairing relationships, including marriage relationships, because the exclusiveness of the dyadic commitment is viewed as disruptive to the larger group. The ideology of the commune usually stresses the importance of caring for all the members equally. When children are brought into a commune and/or born in a commune, they are treated as adults and cared for by all the members of the commune. There are several key studies on communes as an alternative life style which those interested in more detail will want to consult. See, for example, the work of Conover[15] and Berger *et al.*[16]

IMPLICATIONS FOR THE FUTURE

It is evident from our discussion of the emerging transitionary trends that men and women in the 21st century will move even closer to an androgynous society. The Osofskys' point out that in an androgynous environment the patterns of socialization for both males and females will provide alternatives and benefits for both sexes.[17] This is already seen to some extent in many of the adaptive and alternative patterns. For example, in the dual-career family both husband and wife value equity and the opportunity for self-fulfillment through their careers, spousal and parental roles as well as a variety of other roles that each may choose.

The implications of a more adult-oriented society are quite far-reaching. First, with the drastic reduction in the number of children born, the population will stabilize and possibly even decline in time. This will in part alleviate the problems of our natural resources becoming more scarce. Second, it implies that children who are born will be wanted and valued. It is clear that in addition to a reduction in the number of couples desiring to have children that couples who do choose to parent will postpone childbearing longer and have fewer children. Thus more qualitative time by both parents can be spent in the process of nurturing the children who are born.

The needs for providing more opportunities for cooperative living and sharing of social as well as economic resources will have to be taken into account as the family of the 21st century strives to reach its potential. Much can be learned from the life styles of those enjoying the companionship support systems of family clusters, communes, group marriages and other complex living groups. It also is evident that the values of individuality, personal autonomy and freedom, manifest by those who choose to live in unmarried consensual cohabitation and

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[13]Larry Constantine and Joan Constantine, *Group Marriage* (New York: Macmillan, 1973).

[14]James Ramey, "Communes, Group Marriage and the Upper Middle Class," *Journal of Marriage and the Family,* November 1972, pp. 647-655; and James Ramey, "Intimate Groups and Networks: Frequent Consequences of Sexually Open Marriage," *The Family Coordinator,* October 1975, pp. 515-530.

[15]Peter Conover, "An Analysis of Communes and Intentional Communities with Particular Attention to Sexual and Genderal Relations," *The Family Coordinator,* October 1975, pp. 453-464.

[16]Bennett Berger, Bruce Hackett and Mervyn Millar, "The Communal Family," *The Family Cooordinator,* October 1972, pp. 419-427.

[17]Joy Osofsky and Howard Osofsky, "Androgyny as a Life Style," *The Family Coordinator,* October 1972, pp. 411-418.

creative singlehood need to be incorporated into the life styles of 21st century families. It is vital that the family remain open and flexible to the changing needs of its members as well as society.

IMPLICATIONS FOR TODAY

It is evident that the 21st century will see the pluralistic revolution mushroom.[18] We are already in the midst of a pluralistic era which not only tolerates but is beginning to encourage diversity and change. This means that it will be somewhat easier in the 21st century to move from one life style to another. It is equally evident that we need to begin preparing the home economics students of today for the complexities of tomorrow's choices. The kinds of changes that have been outlined in this brief article will be difficult to cope with for those who are unprepared to live in the 21st century.

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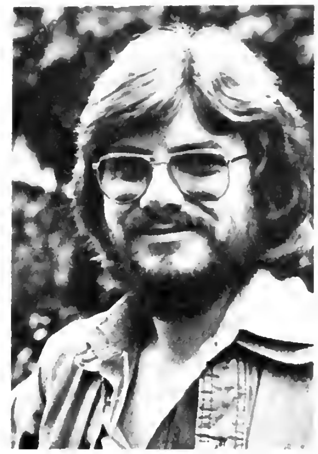
[18]Ramey, *"Intimate" Friendships, op. cit.*

AFFECTIVE LEARNING:

Environmental Ethics and Human Ecology



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THE AFFECTIVE CONTEXT OF HOME ECONOMICS EDUCATION

Home economics subject matter cannot be learned in an affectively neutral context; successful performance in the field requires, at the very least, acquiescence in responding in accordance with certain values. It is worth noting, and elaborating upon, that a value component is present in the very task of discriminating home economics from other disciplines, as a separate subject for specialist study.

The "traditional" disciplines (history, mathematics, the sciences, *et al.*), and such categories of knowledge which have been identified by Phenix (1964) and by Hirst (1974), are disciplines which seek to order knowledge around sets of explanatory and heuristic principles and, as such, are affectively neutral in conception and method. They are affectively neutral in conception because they are discerned and discriminated from one another by supposedly rational and logical cognitive processes. Such a view is exemplified by Hirst's assertion that "whether we like it or not, all knowledge is differentiated into a limited number of logically distinct forms or disciplines" (1974, p. 5). Hirst himself may not be affectively neutral in *supporting* this assertion, but he would have us believe that the actual *discrimination* of "distinct forms" of knowledge is a *logical* discrimination. Thus, in Hirst's view, aesthetics, as a form of knowledge (or, in Phenix's terms, as a "realm of meaning"), is *logically* distinct from other forms of knowledge.

Similarly, since the methods of the traditional disciplines are primarily inductive or deductive (Schwab, 1969, p. 20), such disciplines are also affectively neutral in method. That is, whilst the "scientific method," for instance, *as practiced* by a human being may be "contaminated" (or, more likely, enriched) by that person's affective state, the method itself is presumed to be free of such affective "taint." Thus, although a mathematician may be motivated, in part, by the "beauty" of the formulae he uses, he nonetheless expects to get the same results from his own use of them as he would expect from their use by a computer. Objectivity in the traditional disciplines may well be a myth in practice but, by application of appropriate methods, it is held to be an attainable state.

But in contrast to the ordering of knowledge achieved by the traditional disciplines, it is also possible to view knowledge anthropocentrically, to order knowledge around a problem, or a set of problems, which man faces. Home economics, like medicine and environmental studies, is an exemplar of such kinds of knowledge. Much of the knowledge embraced by these fields is common to the traditional disciplines, but it is not embraced in an affectively neutral fashion. To say that a certain item of knowledge belongs in such a field of study is to make a judgment about its *value* in relation to human problems. For example, *all* knowledge of living things is biological knowledge; that proportion of biological (and other) knowledge which is significant to man's health is also medical knowledge. Cognitive *and* affective value judgments are required in making such a categorization.

The traditional disciplines are concerned with verified knowledge, and with the formulation of warranted conclusions; such disciplines as home economics, medicine and environmental studies are, *in addition*, concerned with choice and action, and with the making of *defensible decisions*. Admittedly, it would be misleading to contrast, for example, environmental studies and biology in terms of such dichotomies as subjective-objective, affective-rational, or value laden-value free, especially when such concepts are given life by human action. But, by its commitment to making *defensible decisions* about environmental matters, rather than merely reaching *warranted conclusions* about such matters, a discipline such as environmental studies ought deliberately and knowingly to embrace the subjective, the affective, and the value laden, if and when these are appropriate to the decision or decisions to be made.

So, too, with home economics: a defensible decision about everyday home and family living ought to take precedence over a warranted conclusion; verifiable knowledge may not always be the most important factor in guiding choice and action. But a failure *explicitly* to recognize the dependence of home economics on the subjective, the affective, and the value laden, may lead home economists to defer to the warranted conclusions and verifiable knowledge of the traditional disciplines in circumstances where such deference might not be appropriate. However, an even more dangerous outcome of the failure to make the affective foundations of home economics quite explicit (and, thus, available to rigorous analysis and critical evaluation) is that *implicit* values may uncritically be accepted as guiding principles of the field of study. Furthermore, whilst their insufficient prominence may result in certain values being accepted uncritically, there is also a danger that some values may not be given *sufficient* prominence. In short, some values which guide the field would, if made explicit, be rejected; and there are other values which, though paid lip-service, deserve *commitment.*

THE ADEQUACY OF THE HOME ECONOMICS VALUE COMPLEX FOR COPING WITH ENVIRONMENTAL PROBLEMS

A critical examination of the origin, nature and appropriateness of the values which guide the home economist seems often to be avoided by the profession; instead we see a blithe (and sometimes rather arrogant) acceptance of the unassailability of the profession's affective goals: "people need the kind of information, skills and attitudes that home economics has to offer" (Yule, 1975, p. 24). Such an assumption about what people "need" should be qualified; Gottman and Clasen (1972) define a "need" as "a problem which exists because of a discrepancy which should be zero" (p. 46), a definition which underscores the point that agreement about needs depends upon agreement about values. Needs are prerequisites, and something which is prerequisite cannot be specified in advance of making value judgments about desirable goals or ends. If people's needs cannot be separated from the valued goals of which the needs are prerequisites, then people "need" the "information, skills and attitudes" of home economics exactly insofar as the achievement of these goals is facilitated by such "information, skills and attitudes." It is open to debate as to whether all attitudes commonly held by home economists may be so facilitatory.

For example, one attitude which has guided many home economists has been concerned with the value of labor-saving devices, often (until recently, at least) virtually ignoring the environmental impact of the resources which may be spent in saving a little human labor:

> As home economists, we have been concerned with the short-run costs and benefits for families of technological innovations and the products that result from these innovations, and we have not looked beyond to the problems created by the technological revolution. It is now evident that we must assess the household energy inputs and outputs in terms of the environmental constraints that we have ignored (Paolucci and Hogan, 1973, p. 13).

One might be tempted to applaud the awareness of environmental issues which appears to be displayed in the latter quotation, but one might also deplore the attitude which seems to motivate this awareness, an attitude which places "the environment" in a quasi-punitive role, as something which effects "constraints" on our energy expenditure. In other words, the passage implies that the reason we *must* limit our energy expenditure is that, if we don't, it will be *bad for us*, not that we *ought* to limit our energy expenditure because, if we do, it will be *good for the environment.*

Similar views to Paolucci's and Hogan's are expressed by other home economists. Field (1973), for example, sees energy conservation as a "challenge for home economists," and adopts the laudable view that "home economists can and ought to be involved not only with the short-run energy conservation measures that could be adopted immediately by almost everyone, but also with the long-term measures that would mean greater changes in life style and resource use" (p. 3). But the challenge still is seen in terms of *constraints*: "the challenge of the energy shortage . . . is how to live well while using less of a resource that is part of almost everything we consume" (Field, 1973, p. 26). That is, the emphasis is on the *shortage* of the energy commodity *necessitating* our "using less"; there is a clear implication that if there were no pressing shortage, there would be no incentive to use less. Field's article thus stresses efficiency, mainly in terms of hints for waste reduction (her hints are of the order of not opening the refrigerator door too often, and turning off unused lights). As such, Field's

article addresses only part of the problem of energy conservation, namely, "using less of a resource"; the article gives only the merest hint that a much more significant part of the issue may be concerned with our attitudes about what it *means* to "live well."

Even when home economists appear to adopt an ecological view of resources and appear to examine how our use of resources affects both us and the ecosystem, their concern for "the ecosystem" seems chiefly to be a selfish one: "we must be aware that we live in an ecosystem that can be sprung out of balance just so far before calamity befalls us" (Montgomery, 1973, p. 16). The implication here is that we might tolerate the ecosystem being "sprung out of balance" to some extent, but we must be concerned "before calamity befalls *us*." Is an unbalancing of the ecosystem only calamitous when it affects *us*? This view is echoed by Ray (1971) in reference to proposed problem-centered curriculum units:

> . . . the standard against which all actions, systems, values, and decisions relating to these units can be evaluated will be that *they are acceptable to the degree that they contribute to man's and unacceptable to the degree that they oppose man's survival* (p. 17).

Such a statement reflects too narrow a view of what comprises a "human problem"; human problems are problems *perceived by* humans, not just problems which directly or indirectly affect man's survival. In this sense, the survival of whales is as much a "human problem" as the survival of man, regardless of whether or not the survival of whales has any bearing on man's survival.

An examination of statements concerning energy conservation in home economics publications indicates that, if we were to classify them according to the *Taxonomy of Educational Objectives* (Krathwohl, 1964) for the Affective Domain, they would mostly appear to be at a very low level. It is doubtful whether a case could be argued for classifying them any higher than 2.1, Acquiescence in Responding; i.e., home economists will acquiesce with the values implicit in the movement toward energy conservation—but only because they have to. If we are generous, we might allow that the statements from home economists urging conservation of energy and other resources indicate the reaching of Taxonomy level 3.1, Acceptance of a Value, but they certainly fail to suggest the making of the crucial jump to 3.2, *Preference* for a Value. To take Field's statement (above) as an example: "the challenge of the energy shortage . . . is how to live well while using less of a resource"; *preference* for the value of resource conservation would demand that "using less of a resource" is a *voluntarily preferable* to whatever is meant by "living well" if that choice has to be made.

TOWARD AN ACCEPTABLE ENVIRONMENTAL ETHIC

Since home economics is, in essence, a study of the near environment, it can be argued that home economists ought to adopt the characteristic value orientation which is explicit in environmental education, a value orientation which goes beyond 3.3, Commitment, on the affective Taxonomy scale, and reaches the uppermost level, 5.0, Characterization by a Value Complex. It is worth examining the explicit defining characteristics of environmental education to ascertain points of agreement and disagreement with home economics.

Perhaps the most authoritative and comprehensive definition of environmental education is that contained in the U.S. Environmental Education Act (1970), which states that:

> Environmental education is an integrated process which deals with man's interrelationship with his natural and man-made surroundings, including the relation of population growth, pollution, resource allocation and depletion, conservation, technology and urban and rural planning to the total human environment. Environmental education is a study of the factors influencing ecosystems, mental and physical health, living and working conditions, decaying cities, and population pressures. Environmental education is intended to promote among citizens the awareness and understanding of the environment, our relationship to it, and the concern and responsible action necessary to assure our survival and to improve the quality of life.

This statement has been cited and accepted by numerous educational authorities as a valid and definitive interpretation of environmental education (Hegelson *et al.*, 1971; Saveland, 1973; Reid, 1973), as has a similar definition proposed by the International Union for the Conservation of Nature and Natural Resources (Carson, 1971, p. 78):

> Environmental Education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings. Environmental Education also entails practice in decision-making and self-formulating of a code of behaviour about issues concerning environmental quality.

Numerous alternative definitions have also been proposed, each stressing a slightly different set of personal priorities (e.g., Gold, 1972), but all containing a common core of essential characteristics.

The first of these characteristics is the awareness of interrelationship between man and his total environment, and the understanding of both the nature and implications of human impact. This is an explicit component of every popular definition but is not in itself sufficient to distinguish environmental education from many other fields of study, including home economics. The second recognized feature of environmental education is that it seeks to promote concern for the quality of life, a concern that is clearly acknowledged in each of the authoritative definitions above, and included in most other personal interpretations. It is a concern which environmental education shares with home economics, but with less restriction to the near (and particularly man-made) environment; it is a concern derived from the awareness of increasing human impact on the *natural* environment, and of the need to understand the implications of this trend. The third fundamental characteristic of environmental education involves a commitment to the principle of environmental conservation. This follows directly from the second characteristic, in that the aim of environmental conservation is to maintain and improve the quality of life through the long-term beneficial management of resources, and is an aspect of environmental education which often has been interpreted as promoting a sense of individual responsibility toward the impact of man on his natural environment, as can be seen in both of the authoritative definitions quoted above.

This personal commitment to the principle of environmental conservation is not yet evident in the implicit or explicit value structure of home economics. Achieving this commitment will not be easy for home economists because, by concentrating their concern in the areas of the home, family and near environment, they have been insufficiently aware of the *natural* environment, in the larger sense. In making decisions, home economists consider nutritional consequences, financial consequences, aesthetic consequences, and material comfort consequences, but rarely environmental consequences. To take a somewhat mundane example, home economics educators often teach pupils about the nutritional and aesthetic consequences of preparing and serving potatoes in various ways, but rarely consider the full environmental consequences of what should be done with the peelings.

An ecological ethic is also an evolutionary ethic, and the formation of such an ethic is dependent upon the assumption that we would behave differently if we could see ourselves and all life as parts of a natural process in the development of the earth. This view may well run counter to many common value systems, because what we know of the origin and evolution of life is rooted firmly in scientific materialism: no mysterious life force, no supernatural explanations are needed. As Kozlovsky (1974, p. 3) puts it:

> Do you look for a closeness to the earth and its processes? You are nothing but an interesting combination of earth's rocks, water and air; these and two billion years of evolutionary explorations, new trials, new combinations, new forms. Can you imagine the earth-awareness of a society wherein each child is taught that he, like all other forms of life, is a trial in the art of surviving and adapting?

Kozlovsky is attempting to answer the kind of question raised by the late Jacques Monod (1970): if man is an accident based on chance, and that accident is perpetuated by the necessity of chemical reactions, what values and ethics can man develop by which to live? Kozlovsky's parameters for an acceptable human ecology have much in common with the aims of home economics, but they extend a little further:

> An acceptable human ecology must do two things: it must provide each living human individual with a satisfying environment, and it must develop an harmonious equilibrium relationship to the rest of the living world, to the surface of this earth (p. 104).

Some of the conditions of such an ecology would certainly conflict with the personal and professional values of many home economists: for example, an acceptable human ecology would provide each individual with the physical, chemical, and biological necessities of life, *but only the* necessities, thereby assuring that all humans, now and in the future, will have them. It would accept the fact that there are too many of us, that each of us wants too much, and that the solution for that aspect of an harmonious ecology is to see to it that there are fewer of us, and that each of us wants, and gets, less. It would be an ecology of *learning to share* and *doing without*. Furthermore, "it would treat all the substances of the earth as sacred, precious, to be carefully used and recycled, *if used at all*" (Kozlovsky, 1970, p. 104). Such an ethic would radically alter our behaviour, if only because, like other *complete* ethics

(such as most religious ethics), it demands of us that we think beyond the span of our own lives:

> The most obscene manifestation of our refusal to accept ourselves as animals, as part of the living productions of this good earth, is our nearly universal attempt to keep ourselves from rotting back to the soil that produced us. To this end you will be saturated with embalming fluid, sealed in a steel box, that placed in concrete, and the whole buried too deep for the roots of grass to suck you once more into the sunlight (Kozlovsky, 1970, p. 107).

Such Whitmanesque views are not exaggerated; and it should be added that, in terms of an acceptable human ecology, it is just as immoral to be cremated as to be embalmed.

The environmental crisis is not one which is encompassed by turning off more lights, opening refrigerator doors less often or, for that matter, by cleaning rivers and reducing automobile emissions; the environmental crisis is an identity crisis, brought upon us by seeing ourselves as disproportionately powerful with respect to our environmental and evolutionary origins. Home economists will continue to contribute to that identity crisis if they continue to perceive the environmental crisis in such trivial terms. Our efforts to effect "an optimum balance between people and their environment" (AHEA, 1975, p. 26) are only limited at *our* end of the relationship. The earth has an almost limitless capacity to absorb our individual abuses—it will take us back one day, no matter how repulsive and destructive we become—but its capacity to provide for us *now* is severely damaged by our failure to uphold our end of the balance.

Environmental problems will only diminish as we develop an ecological and evolutionary image of ourselves. If home economists can relate the near environment to the natural environment at large, they will contribute substantially to the formation of that image.

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THE AESTHETIC ASPECT OF HOME ECONOMICS:

A Schema for Clarifying Its Position Within the Field

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The purpose of this writing is to point out the significance of the aesthetic aspect of home economics through a schema for clarifying its position within the field.

The aesthetic aspect of home economics has long been an integral part of the profession. Proceedings from the Lake Placid Conferences indicate that aesthetic ideals were held by various delegates and incorporated into the basic philosophy of the national association upon its inception in 1909.[1,2] Since that time concepts of art have been included in the curricula of home economics units throughout the country. Moreover, members of the national association have created and sustained the Art Section as a way of supporting the aesthetic aspect of home economics.

Although appreciation for the significance of the aesthetic aspect generally prevails throughout the field, little work has been done to clarify its position. Few references to the aesthetic aspect appear in literature of the field. In an article entitled "What is Art in Home Economics?" Van Dommellen addressed himself to the matter matter in 1968 by stating that ". . . what is encompassed by the subject area designated as art in home economics needs discussion, decision and inspired implementation."[3]

Need for the Aesthetic Aspect of Home Economics

Man lives in two worlds. He lives in a world of nature as well as in a world he constructs through use of his mind., As a result of his involvement in the two worlds he constructs an environment. Sometimes man finds resources in his environment to directly satisfy his needs. At other times he seeks materials from which he creates items for satisfying hs needs. Leaders in home economics have long been concerned with the relationship between man and his environment.

There is a curious ambivalence concerning man and his relationship to his environment in the particular span of time that we currently occupy. At a time when tremendous strides have been made to structure a highly developed environment through technology, it is ironic that so little has been done to make it visually appealing. In writing on the relationship of man to the 20th century visual world Kepes states:

> So far, we have failed to live up to the twentieth-century challenge. Science has opened immense new vistas to us, but we have failed to utilize our new technology fully or to share it wisely. We shrink from accepting the deeper and richer sense of life, uniquely inherent in our twentieth-century world, that is sometimes touched upon in the best moments of our best artists. We have not yet found our places in this broadened world.[4]

The solution for increasing aesthetic vision in America is through education in general and visual education in particular. Educators of the aesthetic aspect of home economics have the specific responsibility of improving the welfare of individuals and families by implementing strategies toward raising the level of visual literacy. Although progress has been made it has been of limited nature due to the lack of a unified concept toward the significance of the aesthetic aspect of home economics.

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[1]Henrietta Goodrich, "Suggestions for a Professional School of Home and Social Economics," *Lake Placid Conferences on Home Economics: Proceedings of the First, Second, and Third Conferences*, 1901, p. 26.

[2]Caroline Hunt. "Revaluations," *Lake Placid Conferences on Home Economics: Proceedings of the First, Second, and Third Conferences*, 1901, pp. 79-89.

[3]David Van Dommelen, "What is Art in Home Economics?" *Journal of Home Economics*, Vol. 60, No. 10 (December 1968), p. 774.

[4]Gyorgy Kepes, *Structure in Art and in Science*, (New York: George Braziller, 1965), p. 1.

A group of educators at the beginning of this century recognized the need for a planned approach toward dealing with man's involvement with his natural and man-made environments and organized programs in home economics accordingly. Specific areas of study were developed to appeal to man's physical, intellectual, and emotional needs. Aesthetic training was considered to be a valuable part of early programs in home economics and continues to be included in curricular patterns in most units of home economics throughout the country today. However, the emphasis up to the present time has been on the formal, technical and manipulative aspects of aesthetic training rather than on the social, conceptual or emotive qualities of art. The rapidly changing compositions of our present environment prompts the need for reassessing the significance of the aesthetic aspect of home economics.

A growing interest in the need for aesthetic concepts specific to home economics is being expressed by educators within the field. Delegates to annual Environmental Arts conferences during the past several years have dealt with various aspects of the concern. Progress toward clarifying the position of the aesthetic aspect of home economics was made in 1968 when the following statement was published upon completion of work by a committee of the AHEA Art Section:

> Art is an integral part of everyday life. Aesthetic sensitivity is fundamental to full and effective living. The thought processes and sensory awareness involved in art appreciation, criticism, and creation contribute to the individual's powers of contemplation, perception, and discrimination. Through the arts, man better understands himself and his environment.
>
> Art in home economics is concerned with the aesthetic development of the individual and with the application of aesthetic knowledge toward the achievement of an enriched and more satisfying personal and family life.[5]

Additional impetus was given to the need for clarifying the aesthetic aspect of home economics in 1970 when *National Goals and Guidelines for Research in Home Economics* was released by the Association of Administrators of Home Economics.[6] The primary purpose of the study which culminated in the publication was to establish major goals which would indicate the scope and strengthen the research base in home economics.[7] Of the five goals, goal three, to: "Improve the physical components of man's near environment," was specifically directed to educators and researchers of the visual areas of home economics.[8]

A Schema for Clarifying the Position of the Aesthetic Aspect of Home Economics

The Core. The cognitive and affective domains delineated by Bloom and associates have been used as resources for developing the core of the schema illustrated in Figure 1.[9] The interrelated domains have been widely used by educators in analyzing and structuring various activities related to learning.

According to Bloom *et al.* the activities of a learning situation which involve knowledge fall within the cognitive domain. Since knowledge of visual phenomena can be a factor in an aesthetic experience, a segment of the core has been ascribed to it and labeled accordingly. In addition to the cognitive domain, Krathwohl *et al.* categorize an individual's interests, attitudes, and values in response to various forms of stimuli in a learning situation as taking place within the affective domain. Since emotional responses can be a factor in the aesthetic experience, a segment of the core has been ascribed to it and labeled accordingly. Other analyses also include reference to motor skills which may be involved in a learning situation. Aesthetic experiences often involve factors related to various processes and techniques. Thus, a segment of the core has been ascribed to skills and labeled as such.

A total aesthetic experience is brought about, through the interaction of 1) knowledge of visual phenomena, 2) emotional responses and 3) skills. However, the mix of factors as well as their relative proportion determine the nature of the experience. Four areas are identified in Figure 1 which depict the interrelationship of two or more factors. Area A, as the factor pertaining to knowledge of visual phenomena, is combined with the factor pertaining to

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[5]Van Dommelen, *op cit.*, Vol. 6010, p. 775.

[6]Association of Administrators of Home Economics. *National Goals and Guidelines for Research in Home Economics*, (East Lansing: Michigan State University Information Services, 1970).

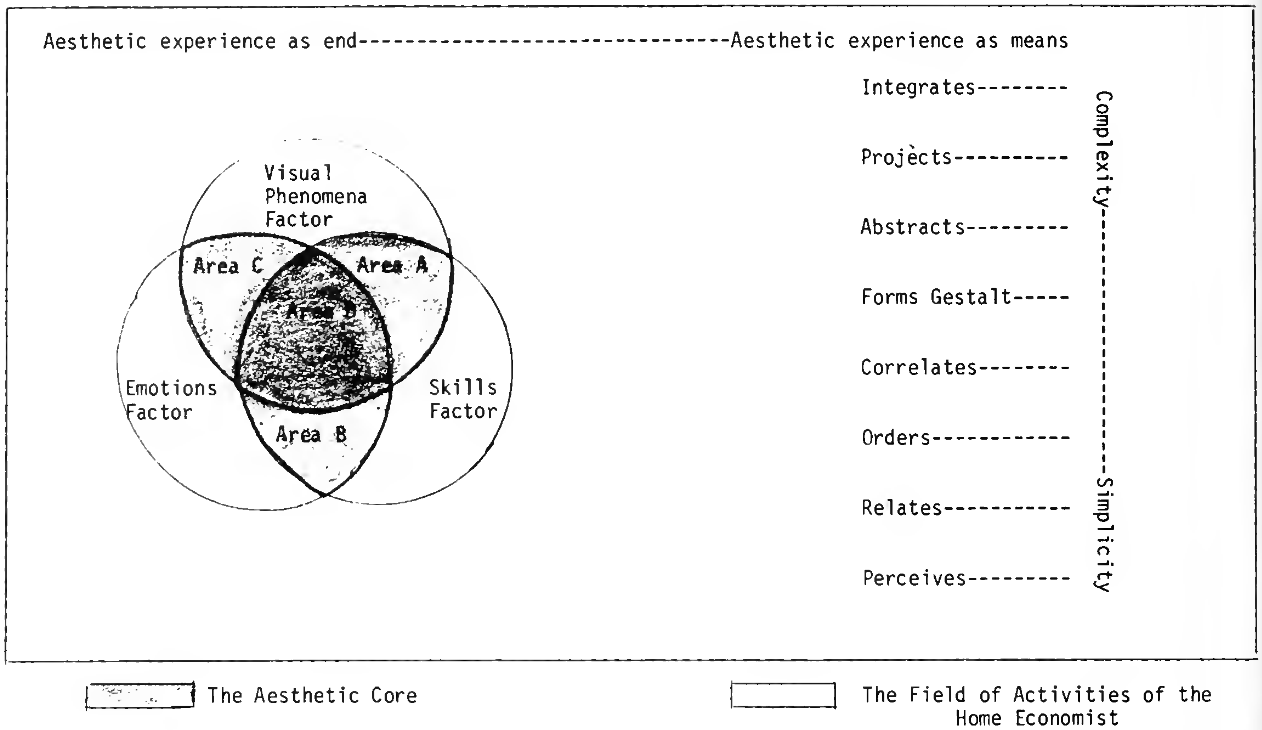
[7]Benjamin S. Bloom, ed., *Taxonomy of Educational Objectives*, Handbook I: Cognitive Domain (New York: David McKay Company, 1956), p. 7.

[8]Edmund Burke Feldman, "The Educational Value of Aesthetic Experience," *Harvard Educational Review*, Vol. 21, No. 4 (Fall 1951), pp. 225-232.

[9]Bloom, *op. cit.*

Figure 1

A Schema for Clarifying the Position of the Aesthetic Aspect of Home Economics



skills. Crafts arise as the products of aesthetic activity in Area A. The term "crafts" pertains to visual forms which have been created through certain combinations of knowledge and skills. Crafts can be duplicated by using the materials according to the processes involved.

Area B is created as the factor pertaining to emotions is combined with the factor pertaining to skills. Aesthetic activity in Area B is characterized by the satisfaction derived from performing certain skills. The visual forms which can arise in the experience are of lesser value. As the activity in Area A is limited by the absence of emotion so is the activity in Area B limited by the absence of knowledge. Both Areas A and B operate as significant training areas for the development of aspects of the more complete aesthetic experience.

Area C is created as the factor pertaining to emotion is combined with the factor pertaining to knowledge of visual phenomena. It is characterized by passive participation in the aesthetic experience. Participants in Area C do not engage in performing motor skills, but achieve emotional effects by responding to certain types of knowledge of visual phenomena. It is within Area C that the greatest number of aesthetic experiences take place. The effects produced in Areas A and B are less complete than those of Area C whereas the effects in Area C can be accomplished with fewer demands than those in Area D.

Area D is created as all three factors interrelate with one another to produce a total aesthetic experience. Activity in it is characterized by active participation of an individual in a situation in which knowledge and skills are carefully blended to produce particular emotional responses. It is within Area D that the richest rewards from the aesthetic experience can be attained. The representation of all three elements in the area provide resources which can be drawn upon to produce intricate combinations of aesthetic effects to satisfy a variety of aesthetic needs.

The factors, and areas in the schema are respectively represented according to distinct sizes and shapes in a static arrangement for illustrative purposes. In actuality, it is unlikely that each factor would contribute equally to an aesthetic experience. Since a disproportionate representation of factors would most likely occur in an actual situation, the magnitude and qualities of the areas to which they contribute would also reflect the origins of their composition.

The operation of the core of the schema has been explained both in terms of the domains from which the factors originate and the areas which are created during the interrelationship of factors to ultimately define the nature of a particular aesthetic experience. Moreover, any particular aesthetic experience occurs in any one of four areas depending upon the number of

factors that are represented. The aesthetic experience is additionally defined by the proportional mix of elements that take place in any of the particular areas. While the inner mechanisms of the core operate to define the aesthetic experience at a given time, the core itself is moved by forces which govern the activities of a Home Economist.

The Field. The basic activities of a Home Economist can be classified in at least two ways. One, according to whether they function as an end, or as a means. And two, according to the level of simplicity or complexity involved. For example, the creation of a visual composition can serve as a decorative wall piece as an end in itself. However, the creation of a visual composition can also serve as a means of learning, a means of rehabilitation, or some other means significant to a type of life satisfaction.

Although the Home Economist can classify his or her activities as an end or as a means, the actions involved can be described as being simple or complex. Home Economists work at various levels. They can perceive factors related to a single situation or relate them to factors previously perceived. Higher forms of activity take place when they order factors according to some plan or correlate them with other factors. The Home Economist forms gestalts when patterns of relationships are identified. The highest levels of activity occur when abstractions are created, when actions are projected toward problems, and when actions are integrated into total life experiences.

In Figure 1 the core of the schema is positioned within the field of activities of the Home Economist. The core moves to the left or right as well as up and down. Movement in any direction is directed by two sets of continua. The end-means continuum of the field pertains to the function of the aesthetic experience. Two basic points of view have been expressed in regard to the function of the aesthetic experience. One incorporates the belief that an aesthetic experience can only be what its name implies if it is engaged in for the sole purpose of extracting pleasure. According to that point of view an experience cannot be considered as an aesthetic one if it is used to fulfill some function beyond that of beauty. A contrasting point of view is taken to express the belief that an aesthetic experience can be used as a means for attaining deep life satisfactions through performing functions beyond the creation of beauty. Feldman in writing of the educational value of aesthetic experience summarizes the two basic points of view as follows:

> Aestheticians will resent the granting of instrumental value to what they have usually regarded as the terminus of an educational and cultural process. They might argue that to suborn aesthetic experience functionally to an utilitarian endeavor is not proper or necessary. However, we wish only to point out that while the aesthetic holds a high place in the hierarchy of values of most cultivated persons, that elevated position does not preclude its making contributions as well as receiving them from the rest of experience. In other words, the ends of one kind of activity can be the means toward another kind, even of lesser rank.[8]

The contention in developing the schema has been that an aesthetic experience can be either an end or a means. Moreover, that the range in which it can function between the two polarities is of particular value to the Home Economist. The aesthetic experience may be drawn upon by the Home Economist as a source of pleasure and satisfaction for the enrichment of life; or, it may be used as a vehicle for sharpening sensitivity directed toward the improvement of individuals and families.

While the end-means continuum directs the path of the core according to the function of the aesthetic experience, a second continuum depicts the level at which it operates. The simplicity-complexity continuum includes eight steps in the proposed model. Each step designates the level at which an aesthetic experience either as an end or as a means can take place. The various steps are labeled according to the activity the individual is engaged in while participating in an aesthetic experience at that level.

The ability to operate close to the complexity polarity of the simplicity-complexity continuum is particularly important to the performance of the Home Economist. Each level of experience requires the resources of all levels leading to it and the capabilities of an individual are compounded as he or she moves from the simplicity polarity toward the complexity polarity. The ability of an individual to operate at complex levels of aesthetic experience indicates that he or she has abundant resources from which to draw for personal rewards as well as for directing meaningful experiences toward the improvement of individuals and families.

The schema presented in this writing has been developed as an effort toward identifying the position of the aesthetic aspect of Home Economics. Considerable work needs to be done before any type of theory can emerge; however, it appears that the schema has potential for use in three basic ways.

Leaders in the aesthetic area of home economics need a conceptual framework for communicating the significance of their area of study among themselves, within other areas of home economics, and among various academic disciplines. As a structure, the schema has potential for communicating the increased need for emphasizing the aesthetic aspect of home economics.

The schema also serves as a potential structural basis for curriculum development. Home Economists working in the area of visual education do not have well developed concepts at their disposal to guide them in planning programs and courses dealing with the aesthetic experience specific to home economics. Although content from the field of art education has been helpful it does not include a broad perspective which is essential if the welfare of individuals and families is to be considered. Aesthetic training in home economics is too often limited to acquiring knowledge or performing skills without the benefit of the emotional component. It is possible that use of the schema could be beneficial in grounding programs and courses to include all three factors of the aesthetic experience.

A third potential use of the schema is that it be utilized in the formation of research projects relating to the aesthetic experience of home economics. The schema as an abstraction of the factors which comprise the aesthetic experience and the field in which it operates provides a structure around which research effort could be designed.

According to a survey conducted by the public relations department of the American Home Economics Association in 1965, over 20 per cent of United States co-educational colleges reported undergraduate men majoring in home economics. These men represented 1.5 per cent of the estimated 48,000 students majoring in home economics across the country at the undergraduate level. For male students, the most popular area of specialization within home economics was food service management followed by applied art, and institutional administration. However,

> In response to the question, "Are men students who major in home economics 'home economists' when they graduate?" Most male graduates would prefer to be called something else, although technically they qualify as "home economists" by virtue of the bachelor's degree in home economics.*

*Journal of Home Economics, 57 (3), 1965, p 242

ROMANTIC LOVE: THE GREAT EQUALIZER?

Sexism in Popular Music

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Two hundred songs that were popular between 1954 and 1968 were examined for sexism. Some of the findings were in accord with traditional sex-role expectations, but others were not. Men were described often as being emotional and submissive, while women were almost as active as thmen. Several explanations for these findings are given. It is suggested that love songs may serve the function of allowing men to release emotions that are considered unmasculine in our culture. It is also suggested that the strong mutual need of romantic love tends to equalize a relationship.

Although there have been studies of sexism in picture books (Weitzman, et al., 1972), text books advertising and the media (Embree, 1970), and literature (Millett, 1971), popular music, a very pervasive medium, has been neglected. Teenagers spend considerable time listening to car radios, transistors and record players. Counting one movie, or one novel, or one hour of listening to music as an exposure unit, teenagers averaged 163 more exposure units per month than young adults (Knox, 1970). Since adolescence is a time of great concern about the opposite sex, it seems logical that the continual exposure to popular music at that time would have some effect on the conceptions of the opposite sex. Knox (1970) found evidence that it does influence one's conception of romantic love.

Most popular music has a romantic theme. This was particularly true in the fifties when it was difficult to get a hit with any other type of song. Horton (1957) found that 87.2 percent of the popular music at that time concerned love. This has changed somewhat since then, but songs of love are still common. Carey (1969) found that in 1966 6.5 percent of the songs were about love. One would expect the songs to be highly idealistic and to reveal the sex-role stereotypes found in other studies. For example, one might expect the man to be portrayed as more active, courageous, aggressive, independent. Women would be expected to be portrayed as passive, emotional, and "pretty." However, it is possible that the element of romantic love could have an unexpected effect on sex role sterotypes. At least it presents an element that has not yet been studied.

Choice of Songs

This study is not an attempt to find specific examples of sexism in popular music. The author is convinced that "sexist" songs can be found. The purpose of this study is to determine the quantity and types of sexism that prevail in popular music. In order to do this, a representative sample is necessary. It would be ideal to take a random sample of all of the hit records during a certain time period. However, the words to all of these songs would not be readily available. Consequently, the sample used in this study was limited to songs to which the words were available.

The sample consisted of 200 songs which were popular between 1954 and 1968. The only criterion for selection was that the song must have been a big hit. Consequently, all types of songs were included from hard rock to ballads, from Elvis to Perry Como. Eighty-five of the songs were golden records having sold a million or more copies. The period 1954 to 1968 was chosen as a period which would have influenced a large number of married adults during their teenage years. Before 1954, there was little or no teenage music as such, so songs before this date were not included. After 1968, the women's liberation movement might have had some some influence on the lyrics. Adults ranging in age from 20 to 40 in 1975 would have been teenagers sometime during the period from 1954 to 1968 and presumably influenced by the music in the sample.

Rock and roll was not kind to female singers. Some research in *Cashbox* shows that in the pre-rock years of 1949-53, 34 percent of the top songs were by female vocalists. With the advent of rock and roll, this percentage began to drop and reached twelve percent for the period of 1957-60. In later years the percentage began to rise again to the 20 and 30 percent level. Out of the 200 songs in this sample, 42 are by female vocalists. This 21 percent is slightly higher than the average for this period.

Description of the Sexes

A list was made of all of the descriptive adjectives and verbs in the songs that applied to one sex or the other. It was surprising to the author that so many of the songs contained little or no description. The songs describe how great it is to be in love or how sad to be left alone, but rarely describe the loved one in any specific way. Many songs are completely interchangeable in that they could be sung by either sex without changing any of the words. Most would be interchangeable with the changing of a few words such as "he" and "she." Fifty-three of the songs were definitely about one sex or the other, and would be difficult to interchange. Thirty-five of these were about females and eighteen about males. Since most of the singers are males, and the songs, love songs, it follows that more of the songs would be about females.

The list of descriptions for males is found in Table 1, and for females in Table 2. They are listed in rank order of the number of songs in which they appear. Descriptions that are similar in meaning were combined in one category in order to make the list more meaningful. For example, "angel" and "heavenly" are combined. Descriptions of the person as "crying" head both the male and female list. That is not surprising for the females, but it is for the males. In our culture it is supposedly unmasculine to show emotion, particularly to cry. This sample gives some evidence that is all right for males to cry over love.

TABLE 1. FREQUENCY OF DESCRIPTIVE ADJECTIVE AND VERBS IN SONGS

MALES

Rank Order	# of Songs in Which description appears	Descriptive Adjective or verb
1	23	Cries
2	15	Needs, depends on
3	12	Submissive (helpless, slave begging)
4	10	Faithful, committed
5	8	Lonely
5	8	Fool
7	5	Cute (attractive, adorable)
7	5	Courageous (tough)
9	4	Evil (cruel)
9	4	Unfaithful
11	3	Liar
11	3	Heavenly (angel, good)
11	3	Killer (deadly)
14	2	King
14	2	Protecting
14	2	Sweet, tender
14	2	Restless
14	2	Aggressive
14	2	Young
14	2	Considerate
14	2	Blue
14	2	Sincere

TABLE 2. FREQUENCY OF DESCRIPTIVE ADJECTIVE AND VERBS IN SONGS

FEMALES

Rank Order	# of Songs in Which description appears	Descriptive Adjective or verb
1	15	Cries
2	10	Pretty (lovely)
3	8	Heavenly (angel, good)
4	7	Unfaithful
4	7	Sweet
6	6	Fearful (helpless)
6	6	Loving
8	5	Devil (mean, wicked)
8	5	Faithful (dependable)
10	4	Charming
10	4	Queen (princess)
10	4	Helpful
10	4	Seductive (sexy, tempting)
10	4	Angry, critical
16	3	Dream come true
16	3	Nurturant
18	2	Homeloving
18	2	Needs
18	2	Prize or possession
18	2	Leader
18	2	Sunshine
18	2	Young
18	2	Emotional

Number two for the males is also somewhat surprising. This category shows the number of songs in which the male "needs" or "depends on" the female. The same category for the females ranks at the bottom of the list. Therefore, this sample shows males saying that they need females more often than females say they need males. This finding fits in well with the third category for males which indicates submissiveness of some kind. The woman takes control of the man who is "lost" or "helpless' or her "slave." A similar category ranks number six for the females.

Number two for the females is "pretty." This substantiates the idea that women are esteemed for their beauty in our culture. There is also some emphasis on men's physical appearance. The category "cute" ranks number eight for males. Number three for the females

is "heavenly." This category is number eleven for the males. This corresponds well with the evidence that men tend to idealize women more than women idealize men (Udry, 1974).

Women are described as devils as well as angels (number eight). This is indicative of the devil or angel attitude toward women that exists to some extent in our society. In fact, one of the songs in the sample has the title "Devil or Angel." For males the "evil" category ranks number nine.

The females in the sample are described as being "unfaithful" (number four) slightly more often than the males (number nine). The males are described as being "faithful" (number four) more often than the females (number eight). Many of the songs, 41 to be exact, are about a female leaving the male and consequently the male accuses her of being unfaithful. Only thirteen of the songs are about males leaving females.

It is interesting to see not only what is high on the list, but what is low or completely missing from the list for both sexes. Intelligence as an attribute is completely missing from the list for both sexes. But "fool" ranks quite high for males (number five), although it is missing for females. These are mostly instances of males describing how love or a woman made a fool out of them. "Courageous" is completely missing for females, but ranks number seven for males. This conforms to sex role stereotypes. Although women are not described as being courageous, they do get angry occasionally (number ten). This anger is usually manifested at the unfaithfulness of their lover and they tell him to get lost. There are no examples of males getting angry at females for unfaithfulness. Their reaction is usually one of sadness. There is little association of women with home and family in the sample. Only two out of the 200 songs in the sample made this association.

Frequency of Being Active

The songs were also examined to see how often they portrayed males and females as being active. Basically this was a process of looking for action verbs and determining who did the action. For example, "she kissed me" would be counted as being an example of the female being active in one song. There were 136 songs which had examples of males being active and 121 songs which had examples of females being active. Although the males do have a slight numerical advantage, the difference is small. Most of the difference comes from songs by female vocalists. They are more likely than the male vocalists to show only the male being active. In most of the songs the women are as active in love as the men are. They kiss the man, hold him, and love him.

Not only are the women usually portrayed as being active in love, but many of the songs show complete role reversals. The million seller "Mr. Blue" (1959) talks about the male waiting passively at home for her to call while she is out painting the town and breaking his heart. Another million seller "These Boots Are Made For Walking" (1966) portrays a tough, aggressive girl who is going to walk all over her unfaithful lover. This song made Nancy Sinatra famous and into a sex symbol.

Possessiveness

The songs were also examined for the use of possessive terms such as "my," "mine," and "belong to me." Here there is a substantial difference. Twenty-five songs had women using possessive terms in reference to men, while 57 songs had men using possessive terms in reference to women. So it would seem that men are more possesssive of women than vice versa.

There are a few songs in the sample that are definitely sexist. For example, "Bird Dog" (1958) and "El Paso" (1960) depict women as objects to be fought over by men and won with little regard for her feelings. "I Got a Woman" (1958) talks about the woman's place being in the home.

Possible Interpretations

Although some sexism was found, the overall picture was more equalitarian than expected. Perhaps in retrospect, some explanation of this can be given. Romantic love in our society is depicted as an overwhelmingly powerful force that strips away all self-control and reason. Many songs represent the idea that "I Can't Help Falling in Love With You." One popular song titled "A Thing Called Love" is an excellent example of this point. It describes a giant of a man who would never back down, but who is brought down on his knees crying by

love. In the chorus, love is described as being strong enough to rule the heart of any man. In our culture, men are supposed to exercise self-control, be unemotional, and to dominate. To do this, they must repress their needs to be emotional and dependent. But these needs still exist and seek expression (Putney and Putney, 1964). If it is believed that love is stronger than any force, then it is not unmasculine to lose self-control, cry, or be led if one is truly in love. The myth says that even the strongest men are controlled by love. It is probably psychologically healthy for men to express themselves in this way. Thus, the romantic love complex could be very functional for men in our culture. It allows men to act in "unmasculine" ways and still retain their masculine identity. Women also have a need to let themselves go, but since it is not considered unfeminine to show emotions, they do not need as much incentive. This could help to explain why more songs depict males crying than females. It is also possible that some women in our culture have a repressed need to be dominant and to control. The image of a "powerful" male crying at their feet could help fulfill this need for women.

If love songs help facilitate the expression of repressed needs, then one would expect the songs to change as the repressed needs change. Carey (1969) found that the songs of 1955 depicted boys as being powerless and helpless with girls holding all the power. This substantiates the present study. Later songs reversed this relationship with boys having more power. The later songs also showed less emphasis on love as fate. The participants had greater control over love. Some of these changes could be attributed to changes in sex roles. If there is greater latitude now toward men expressing their feelings, there would be less need for the myth of love as an overpowering force.

Carey's study (1969) indicates that women have lost a great deal of power in the love relationship as depicted in song lyrics. If women have really lost this power, perhaps the explanation lies in the changing sexual behavior of females. As women became more sexually permissive, they could have lost some of the power that they had over men. In exchange theory terms, the more easily obtainable an item is, the less value it has. Waller (1938) has hypothesized that love results from sexual frustration. Many feminists are convinced that sexual permissiveness has resulted in a loss of power for women (Firestone, 1971) and have even gone so far as to recommend chastity (Densmore, 1974).

Romantic love is a time of great need for the other person. The greatest desire of the lover is to be loved in return. It is difficult to show love passively. Love requires response and action. Therefore, it is not surprising that men want to be kissed as well as kiss, and to be hugged as well as to hug. One wonders how much truth there ever was to the idea that men like women who are passive in love. This would be an interesting topic for further study.

The idea that two people are meant for each other is very strong in the romantic love myth. Both male and female feel they have everything to lose if the relationship breaks up. Since the alternatives to the relationship are so aversive, both should be very careful of offending or hurting the other. This would tend to make the relationship equalitarian in terms of power (Heer, 1963).

Summary and Conclusions

This study in examining 200 popular songs found some things in the sample that confirmed current sex-role stereotypes, some that contradicted them, and some that fit into neither category. The findings that confirmed sex-role stereotypes were (1) most of the songs were by male vocalists, (2) females were often described as being "pretty," (3) males were described as being "courageous" while females were not, (4) females were more often described as "heavenly" or "angels," and (5) men more often used possessive terms in referring to females.

The findings that contradicted current sex-role stereotypes were (1) more of the songs were about women than about men, (2) men were described as crying more often than any other description and more often than women were so described, (3) men were more often described as needing women than women were described as needing men, (4) men were more often described as submissive than women were, (5) more songs are about females leaving males than about males leaving females, (6) very few songs associated women with home or family, and (7) women were portrayed as being almost equally as active as the men.

Some other findings were that women were more often described as being unfaithful and the men were more often described as being faithful, men were often described as fools while women were not, neither sex was described as being intelligent, and most of the songs were quite non-specific in their descriptions and with few changes could be sung by either sex.

There are several possible explanations of those findings which conflict with current sex-role expectations. Males, who are supposed to be unemotional, probably need some emotional outlet. Since love is described as an all powerful force, a male can be controlled by love without feeling threatened. The songs could also allow women to release repressed desires to dominate men. A person in love wants most of all to be loved in return. This affirmation of love would seem to require the partner to be active also. Romantic love is a time of great mutual need. The strength of this mutual need should tend to equalize the power in the relationship.

This study has dealt with ideas expressed in a sample of popular songs. Some of the findings are provocative and contrary to current sex-roles. They should next be checked with real people. Do men really cry over love? Does strong reciprocal romantic love tend to equalize power in a relationship? Do men really prefer women to be passive in love?

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Despite isolated cases, there has been no long-term trend towards an increased male participation in the high school home economics teacher role. There is, however, some indication that the situation could change in the immediate future. The Brigham Young University, for example, reported an increased male enrollment in home economics in 1975. Due to requests from the public schools for men to teach at various grade levels, more men were enrolling in family relations and early childhood development programs.*

The record of male participation is somewhat better at the college-teaching level, even if the distribution of men between the various home economics specializations has not been balanced. The movement of men into this aspect is largely a post World War II phenomenon, although male teachers were not unknown prior to this time. Benjamin R. Andrews was a long time teacher of "Euthenics" at Teacher's College Columbia University, and man did teach sociology and psychology in home economics departments throughout the 1930's. Some men became involved in this period because home economics was part of a larger administrative unit for which they were responsible.

McGrath and Johnson surveyed member institutions of the National Association of State Universities and Land Grant Colleges in 1968 and found that 90 per cent of the home economics faculty were women. By and large the male professors were younger than the women; over 80 per cent of the men were under 45 years of age in 1968, in comparison with 55 per cent of the women.** McGrath and Johnson suggested that this fact, together with other available evidence, was indicative of increasing male participation.

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*Ramsey, L. "Home Economics Graduates Remain Employable," *AHEA Action*, December, 1975, p. 6

**McGrath, E. J. and J. T. Johnson. *The Changing Mission of Home Economics*, Teachers' College Press, New York, 1968, p. 29

SUBJECT INDEX FOR ILLINOIS TEACHER
Volume XX, 1976-7

Prepared by Royston Lawson

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NEW GAME IN FOOD AND NUTRITION

CONCENTRATE ON PROTEIN

by

Linda Larson Valiga

Graduate Student in Home Economics Education

University of Illinois

This game is designed to teach the concept of Protein Complementarity and can be used in Junior High, High School and with various adult groups. It can be played by one individual, teams, small groups, or an entire class.

The game is composed of 40 illustrated food cards, which are paired to achieve protein of high biological value and thus score points. Students learn that some foods can stand alone and others need support from other foods with different amino acids to be of equal quality protein. Game was developed under the supervision of Dr. Robert Reber, nutritionist, and Dr. Hazel Spitze.

Price $3.50 (post free) from ILLINOIS TEACHER

INNOVATIVE TEACHING TECHNIQUES—HOME ECONOMICS

Division of Home Economics Education
Department of Vocational and Technical Education
University of Illinois, Urbana-Champaign

Following are brief descriptions, and an order blank for those materials now available.

HOME ECONOMICS LOW LITERACY MATERIALS. Booklets listed are third- to fifth-grade reading level, 6 x 9 inches with stiff cover.

A1. **Get Lost, Extra Pounds!** Cynthia Theiss. 15 pp. Illus. A story of two women who needed to lose weight. They learn that starvation is not the way and that they can eat a balanced diet, remain healthy, and still lose ten pounds in ten weeks.

A4. **Who Needs Calcium?** Carolyn J. Wax. 8 pp. Includes a quiz, with key, on why we all need calcium; a chart comparing calcium needs of children and adults, pregnant and nursing women, males and females; and two exercises to relate diet to calcium needs.

A5. **Safety! Children at Home!** Janet Tracy. 32 pp. Illus. In three stories of preschool children, the dangers of poisoning are told with emotion and some preventive measures suggested.

A6. **The Nutrition Gazette.** A four-page "newspaper" on so-called health foods explaining facts and sources of dependable information and including ads showing comparative costs in health food stores and supermarkets, a crossword puzzle and an "Ann Landers-type" column.

SELF-TEACHING BOOKLETS These can be used by a single student in independent study or by a group, with or without a teacher.

B1. **Hamburgers and You.** Janice Tronc and Judy Oppert. This booklet and board teach that a hamburger contains nutrients, which contain elements, which make up body cells which constitute "body parts" which make the human body. Included are instructions for making a puzzle board with manipulable pieces, instructions to student, booklet, and answer sheet.

B2. **Calories and You.** Carolyn J. Wax. The analogies, explanations, questions and problems presented in the kit lead the student to discover the body's need for energy, the individual differences in relation to energy needs, what calories are and where they come from, other food values in relation to calories and specific calorie needs. The student would need a set of Comparison Cards* (not included).

B3. **How to Use the Comparison Cards.** Janice Tronc. This kit explains, in step-by-step procedure and very simple language for slow learners, how to use the Comparison Cards of the National Dairy Council. The instructions to the student lead him to discover some nutrition information from the cards as he learns how to use them for further study. The student would need a set of Comparison Cards, not included with the kit.*

B4. **Let Protein Work for You.** Carolyn J. Wax. The first part of this kit uses case situations and related questions to illustrate how protein works for the body. In part two, the student classifies foods that are good protein sources into food groups and discovers what kinds of foods provide protein.

B.5 **Shopping for Protein—Calorie-wise and $-wise.** Carolyn J. Wax. In part one of this kit, the student classifies foods as poor, good, or very good sources of protein, and discovers, in problems that follow, which foods are high in protein and low in cost and calories. In part two, the student makes food plans that are economical and that will provide him with 100 percent of his daily protein need. The student would need a set of Comparison Cards, not included with this kit.*

B6. **A Pattern for a Balanced Diet.** Hazel Taylor Spitze. This kit contains instructions for making a jig-saw type puzzle with 72 pieces, in five shapes, each representing a food. To work the puzzle, a student selects any 14 pieces that will fit the 10- x 12-inch board. When she/he gets a "fit" on the board, she/he writes down the foods that made it work, on the sheet provided, and without using any of the same pieces, works it again. After repeating this procedure four times, she/he discovers that the only pieces she/he has left are foods which do not help "balance" a diet. Then the foods on the sheet are categorized by type and totaled. The student discovers that every time the puzzle "works" there is a pattern. They are able, by the shape of the pieces, to see which foods can substitute for which other in the diet. There is no mention of the "Basic Four" although this is the pattern they discover. Neither is there any mention of meals. An accompanying leaflet provides questions and suggestions.

*Comparison Cards may be obtained from National Dairy Council, 111 North Canal Street, Chicago, IL. Approximately $3.50.

B7. **Child Care in a Day Care Home.** Virginia Nash under the
B8. direction of Dr. Mildred Griggs. This kit contains 2 booklets, B7 for the teacher and B8, with a series of stories, for the student (5th grade reading level) with illustrations and questions to answer in writing or orally. This kit teaches how to prepare for, organize, and conduct a day care home and includes information on licensing, equipment needed, procedures to assure safety, etc.

GAMES AND SIMULATIONS

C1. **Nutrition Insurance.** Judith Oppert. A set of "insurance policies" for health. Some students may represent insurance agents and try to "sell" their policy to other students. Each competes with the other as they try to make theirs sound best. Each student "customer" could be given a set amount of calories with which to "buy" his choice of policies. "Premiums" consist of food choices which provide the needed nutrients to insure against the disorder. One of the learnings students discover as they contemplate the various premiums is that some foods pay the premium for several policies. Policies include: goiter insurance, nervousness insurance, diseased bones and teeth insurance, iron-deficiency anemia insurance, cell separation insurance, overweight insurance, underweight insurance, and wearing out insurance. An accompanying leaflet suggests some possible uses.

C2. **Concentrate on Protein.** Linda Valiga. This game is designed to teach the concept of protein complementarity, and can be used in junior high, high school, and with various adult groups. It can be played by one individual, teams, small groups or an entire class. The game is composed of 40 illustrated food cards, which are paired to achieve protein of high biological value. Students learn that some foods can stand alone and others need support from other foods with different amino acids to be of equal quality protein.

REFERENCE MATERIALS

D1. **Inside Information.** Carolyn J. Wax. "Inside Information" is basic nutrition information in very simple language about 11 nutrients that answer such questions as (in the case of calcium): What is calcium? Why do we need calcium? What happens if you do not get enough calcium? Who needs calcium? The information is printed so that it can be cut out and pasted on 3 x 5 cards to be filed, or to be put in boxes labeled "Building Blocks of Food." An accompanying leaflet suggests some possible ways to use the "Inside Information" in teaching.

D2. **Bibliography of Low Reading Level Materials in Consumer Education.** Gail Vander Jagt. This is an extensive, annotated bibliography of materials available at elementary reading levels. It is reprinted from *Illinois Teacher*, Vol. XV, No. 2.

D3. **Nutritive Values of Common Foods in Percent of RDA.** (The "Percent" Charts.) Computations were made by Gail Vander Jagt. One-hundred-and-seventy-four foods have been taken from USDA Home and Garden Bulletin No. 72, and translated into percent of RDA for calories and eight nutrients, using as the 100 percent reference the woman 22-35. The foods are grouped as follows and alphabetized within groups: milk and milk products; meats and eggs; vegetables; fruits; cereals; breads, cakes, and pies; other sweets; fats and oils; and miscellaneous. The charts may be utilized in many games, simulations, learning quizzes, self-teaching kits, etc. An accompanying leaflet suggests some possibilities.

D4. **Approximate Nutritive Values of Common Foods.** (The "X" Charts.) Computations were made by Gail Vander Jagt. These charts are the same as above, except that instead of numbers showing exact percents, values are shown with X's, each of which represents approximately ten percent. Younger children and slower learners might more easily add ten X's to reach the optimum 100 percent than they could add actual figures. Some accuracy is lost in the rounding, of course. Nevertheless, anyone can see at a glance that the more X's they see opposite a food, the more nutritive value it has. An accompanying leaflet suggests some possible uses.

D5. **Nutrition Knowledge Test for Consumers.** Hazel Taylor Spitze. This 280-item test is in 46 clusters of true-false items based on the Basic Conceptual Framework of Nutrition as defined by the Interagency Committee on Nutrition Education. In simple language and with reliability around .90, it may be useful to both teachers and researchers.

D6. **A Selected Bibliography in Home Economics Education, 1966-1976.** Sarojini Balachandran. Compiled from eight indexes and several additional journals in home economics education, this 150-page bibliography deals with the following selected topics as they relate to home economics education: changing marital forms, changing sex roles, consumer problems, family relations, futurism, human relations, human rights, leisure time, population, and world food problems.

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